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A
T R E A T I S E
O N T H E
A S T H M A.

TO WHICH ARE ADDED

CASES and OBSERVATIONS,

In which the ASTHMA is complicated with
the following Diseases :

Catarrhs.
Humoral Asthmas.
Tubercles in the Lungs.
Consumptions.
Universal dropfical Swellings.
A Dropfy of the Breast.
Jaundice.
Gout.
Rheumatism.
Chronic Weakness.
Intermittent Fevers.
Inflammations of the Lungs.

Abscesses and Ulcers in the Lungs.
The False Peripneumony.
Spittings of Blood.
Excessive Corpulency.
Severe Headachs.
Teething.
Cutaneous Eruptions.
Obstruction of the Menfes.
A Venereal Ulcer of the Nose.
Spasmodic Affections of the Throat.
Hysteric Fits.
General Convulsions.

By THOMAS WITHERS, M. D.
Physician to the YORK COUNTY-HOSPITAL.

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MDCCLXXXVI.

REGISTER



AMERICAN

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CASES and OBSERVATIONS.

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DR. THOMAS W. THERRS, M.D.
TOWN OF NEW YORK COUNTY HOSPITAL

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Q. And the fact that you were not present at the time of the shooting was not discussed with you by any of the other officers?

1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".

TO THE
PRESIDENT
AND
MEMBERS

OF THE
ROYAL COLLEGE
OF

PHYSICIANS,
IN TESTIMONY OF THE GREATEST RE-
SPECT FOR THAT LEARNED BODY

THE
FOLLOWING
TREATISE

IS
MOST HUMBLY INSCRIBED

BY THE

AUTHOR.

TO THE
PRESIDENT
AND
MEMBERS



ROYAL COLLEGE

OF

PHYSICIANS

IN TESTIMONY OF THE GREATEST RE-
SPECT FOR THAT LEARNED BODY

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MOST HUMBL Y INSCRIBED

BY THE

AUTHOR.

To the R E A D E R.

THE following Treatise, having been many years in hand, and cost me much labor and study, will, I hope, be of service to my fellow-countrymen, who are particularly subject to ASTHMATICAL and CONSUMPTIVE COMPLAINTS. This end being attained, I shall have my reward. To relieve the miseries of the afflicted is one of the noblest employments of man, and gives the highest satisfaction to the mind.

Altho' this Treatise receives its title from the ASTHMA, and particularly from the CONVULSIVE ASTHMA, yet *Winter Coughs*, *Humoral Asthmas* and *Consumptions* are all fully considered, along with their symptoms, causes, and methods of cure. Indeed it would be impossible to treat accurately of the former, without including the latter; for they are so blended and interwoven in nature, that it is a very rare occurrence

to

to find one perfectly distinct from all the rest. But these facts will appear more fully in the ensuing Treatise.

The reader will find that I differ in opinion from those who assert, that the Asthma is not a curable disease. I can affirm with truth, founded on experience, that it may often be cured, so as very seldom or never to return again, unless the person is exposed to the same occasional causes which first brought it on. *Venienti occurrere morbo* is one of the shortest and best rules for preserving health and prolonging life. It is the neglect of the Asthma at its first rise, if not perhaps for many years after, which renders it incurable; and this is a fact concerning many other diseases as well as the Asthma.

The *Flowers* or rather the *Oxal* of Zinc, which, when unadulterated and given in a sufficient dose, I have frequently used with great success in the Asthma, is a remedy well

well known and often given in other cases of spasms and convulsions. Zinc is a mineral substance found in the bowels of the earth, in like manner as mercury, antimony, and many other valuable medicines of the mineral kingdom. As its natural history is so fully given by all chymical and materia medica writers, it is unnecessary here to detain the reader with an account of it.

In this Treatise I have endeavored to include every thing which may be useful to those who labor under the Asthma, by way of regimen as well as medicine, and by way of prevention as well as cure. Floyer's treatise, tho' full of false theory, vague hypotheses, contradictory opinions, and ridiculous practice, is nevertheless one of the best on the subject, and contains facts which, being drawn from nature, will stand the test of time. Millar is very short and imperfect. Boerhaave seems to have had no distinct notion of the disease; and all the old authors, such as Hippocrates,

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crates, Galen, &c. are very confused and unintelligible. From these, nevertheless, and other authors I have selected what is useful, and particularly from Floyer, who (as I shall afterwards shew) had a true notion of the convulsive Asthma, but so obscured with false facts and false reasoning, as not to be easily discovered.

The public Lectures of Dr. Cullen, who has with admirable success made the nervous system his particular study, have afforded me the greatest light on this most important subject. The same remark is also true with regard to a former publication of mine on Chronic Weakness, which contains many useful facts and observations similar to those which are delivered by him in his most excellent Lectures on indigestion, weakness of the stomach and bowels, and relaxation of the solids. I mention this here, because in the hurry of publication I forgot to mention it formerly — an omission which I am very happy in having this opportunity of publickly

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lickly acknowledging.—I must likewise, for the same reasons, confess with gratitude, my many and great obligations to the late Dr. Gregory and to Dr. George Fordyce, from an attendance on whose public Lectures I have treasured up many useful and important observations on the Asthma, as well as on Chronic Weakness.

With regard to stile, I have endeavored to render mine so easy and intelligible, that it may be understood, not only by the Faculty, but by others who have not made medicine their study. Those parts in particular concerning diet, regimen, causes, &c. which are the most useful for asthmatics to know, are written in the plainest language, all hard words and terms of science being carefully avoided.

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greater irritability and weakness of the constitution in these days, may, in some measure, account for the greater frequency of the disease. The rapid progress of mankind in all the various arts of modern luxury and refinement. An advanced state of knowledge concerning the laws and doctrine of the nervous system, &c. &c. &c. is the real cause of the improvements which have been made in

ASTHMA.

THE **ASTHMA** being a frequent disorder, the history and cure of it have of late greatly engaged the attention of the medical faculty. While the laws and facts relative to the nervous system were, as in former times, not much regarded, nor well understood, it will not appear surprizing that the disorder, which is the present object of our enquiry, was so little known to the antient practitioners of medicine. We can indeed find some traces of it, interspersed throughout their writings, but those traces are so obscure and imperfect, that they yield no satisfaction to the enquiring mind. No doubt this disease is more frequent in the present æra, than it formerly were, yet it certainly

tainly has existed time immemorial. The greater irritability and weakness of the constitution in these days, may, in some measure, account for the greater frequency of the Asthma, especially if we add the inventive genius, and the rapid progress of mankind in all the various arts of modern luxury and refinement. An advanced state of knowledge concerning the laws and doctrines of the nervous system, grounded on facts and confirmed by anatomical investigations, is the real cause of the improvements which have been made in the history and treatment of the Asthma. Now as the late useful discoveries, relative to the nature and cure of this disease, are no where fully and clearly set forth, it will not appear an uninteresting labour in us to endeavour to render the knowledge of them more universal, especially as we hope something useful may be added concerning the cure.

Before we proceed to the history of this disease, it may not be improper to hint at the ambiguity of the term ASTHMA. Some authors have made use of this word in a most vague manner, to express indiscriminately every species of difficult breathing. But we shall employ it in this treatise, in the same sense



sense in which it is employed by Dr. Cullen, in his most correct and useful Synopsis on the definitions of diseases; and therefore, strictly speaking, it will, when used alone, signify the *nervous, convulsive, or spasmodic Asthma*. But as the term *nervous* is so inaccurate and undefined, we shall make use only of the term *convulsive*, because it is the most familiar. The other species of the Asthma, which is a very different disorder from the convulsive, and which we shall have occasion to treat of, is properly named the *humoural or spitting Asthma*, because the patient generally expectorates a quantity of an humour or phlegm. This species of the Asthma is also termed *humid* for the same reason, and *senile*, because it is common to old people. By some too it is stiled the *peripneumonia notha, or spurious peripneumony*; but to this name the generality of practitioners affix a very different idea. We shall speak of it under the title of the *humoural Asthma*, and as we shall fully explain hereafter what we mean by it, no body, it is hoped, will quarrel with us about a word. The great variety of synonymous terms employed in the healing art, have served only to perplex it, and to render it more confused and unintelligible, not only

to the world in general, but often to medical practitioners themselves.

History of the A S T H M A.

The attack of the convulsive Asthma is sudden, and, at its first appearance, the duration of the fit is for the most part short. The symptoms, which usually precede it, are languor, flatulency, head-ach, sickness, pale urine, disturbed sleep, a sense of straitness and fulness about the pit of the stomach. In some cases there is an uncommon stupor, drowsiness, and heaviness. The fit is frequently observed to come on about one or two o'clock in the morning, or at any hour after the first sleep. The patient wakes suddenly, and feels a great tightness and constriction around the chest, with a difficulty of breathing and an impediment to the free admission of air into the lungs. Both inspiration and expiration are slow, laborious, and accompanied with constant wheezing, particularly the latter. Great bodily anxiety always attends this disorder. As the lungs cannot be sufficiently dilated with air, the passage of the blood through the pulmonary vessels is not free. Hence the face, in full and plethoric habits,

ON THE ASTHMA. 5

habits, appears red and bloated, and the vessels of the eyes are unnaturally turgid with blood. The action of the heart is greatly disturbed, as is evident by the weakness, irregularity, and encreased quickness of the pulse. During the fit the patient has generally a longing instinctive desire for cool fresh air, which always revives him. A small close room with a fire in it is extremely offensive to him, and all warm things, given internally, encrease the flatulency in the stomach and bowels, which is always the most troublesome after a full meal. When the fit has continued a few minutes, half an hour, or an hour, it leaves the patient; his respiration becomes free and natural; his pulse slow and regular; his complexion puts on its usual appearance; and the bodily anxiety goes off. The urine is generally pale, and the skin somewhat dry before the fit, and during its progress; but at the termination of it, the urine, for a day or two, is high coloured and deposits a sediment*, and the skin feels soft and moist.

This is the description of a first and moderate attack of the disorder. In some cases it appears in a more violent form, even at its com-

* Floyer, p. 30.

commencement, and continues for several days before the fit terminates. Sometimes the patient will have one fit, and then remain free from a relapse for many months*. At other times I have seen fits come on for several nights together, the patient appearing almost perfectly well during the day, with his appetite and pulse both natural.

When the Asthma once makes its attack, it seldom or never fails to recur, though the intervals between the fits are very uncertain†. Relapses are commonly attended with an increase of the symptoms, and the vigour of the constitution is gradually impaired, till, by length of time, general or chronic weakness

* Floyer observed, that longer fits in his own case had, in general, longer intervals.

† When the Asthma is rooted in the constitution, it often makes its attack in the spring and autumn. In many cases it attacks periodically, once in ten days or a fortnight. Sometimes it occurs regularly at the full and change of the moon. Floyer mentions a case where the fits occurred for seven weeks together, and the patient was obliged to sleep in a chair. But from the strictest observations it is found upon the whole, that there is no certainty or regularity observable in the attacks of the Asthma. The reason why the fits so often occur first in the night, is thought to be owing to the heat of the bed, and the horizontal posture in which the patient lies.

ON THE ASTHMA. 7

ness is induced. The difficulty of breathing in the fits arises to a much higher degree, and the sensation of tightness over the breast is so great and distressing, that the patient feels as if he were bound with cords*. His anxiety at this period is inexpressible, and he labours in respiration, as if every moment would be his last. Severe vomiting frequently occurs, and the matter discharged is slimy and frothy, or of a greenish or yellow colour. The hands and feet are cold, and the patient is subject to palpitations and faintings. Cool fresh air becomes absolutely necessary. The eyes are prominent; the face is sometimes pale, and sometimes high-coloured, bloated, or livid; the pulse is extremely weak, irregular, and even intermitting; there is a difficulty of swallowing; the patient can scarce speak, cough, or expectorate during the fit, and the stomach and bowels are violently distended with wind.

While
 * It is very probable both the lobes of the lungs are not in all cases equally affected with the spasmodic constriction. Floyer remarks this of his own case, that the constriction was chiefly on his right side, on which he could lie with the most ease. This fact we may account for, by observing that the left lobe of the lungs was most at liberty to perform the office of respiration when he lay on his right side; for when he lay on the left side, the weight of the right lobe, pressing on the left, would naturally obstruct his breathing.

While thus laboring for breath, he is obliged to rise from his bed, not being in the least able to continue in an horizontal posture, nor to bear even the weight of the bed-cloaths upon him. His shoulders are constantly elevated, to give the muscles of the chest their greatest power of action, in raising the ribs in inspiration. At this time too the patient, though before costive, will frequently have a loose stool.

When the violence of the fit abates; and respiration becomes free*, the cough returns, and the patient begins to expectorate phlegm, which is sometimes intermixed with blood†. As soon as an easy copious expectoration takes place, it affords great relief, for the evacuation is made immediately from the parts affected,

* Floyer very properly observes, that the difficulty of breathing frequently goes off before any quantity of phlegm is spit up, which is a fact of importance, for it clearly denotes the existence of a spasmodic constriction in the air-vessels, as we shall afterwards have occasion to mention.

† Floyer very accurately observes, that the spit is white, greenish, or yellow, and in old cases, putrid, saltish, or acid, and bloody. He observes in another place, that the spit is sometimes full of black streaks, which appearance I have seen in many cases.

fectcd,—from the very vessels which have been contracted with spasm. This expectoration is one of the most certain signs of the abatement of the complaint, as it denotes the solution of the spasmodic contraction of the air-vessels, which Anatomists call the *bronchial* vessels. Along with this expectoration of mucous matter, intermixt sometimes with blood, the other symptoms also of the solution of spasm occur, which have been before-mentioned ; I mean a moisture and softness of the skin, and a sediment in the urine.

The blood which is spit up in this complaint, proceeds generally from a rupture or dilatation of blood vessels in the lungs ; a symptom which may easily be accounted for, from the great obstruction of the circulation of the blood through the pulmonary vessels, during the continuance of the fit. In some cases, indeed, the quantity of blood which is spit up, is in full habits very considerable, and at the same time critical, being accompanied with an abatement of the symptoms. But all free discharges of blood from the lungs, though they afford relief, yet they are unfavourable signs, as they denote greater violence of the disease, during the course of which the very efforts of nature

to relieve are in themselves so alarming. The nose too will sometimes gush out with blood during the severity of the fit, from the obstruction given to the return of the blood through the pulmonary vessels, into the left auricle of the heart.

Thus in a short time the fit of the convulsive Asthma goes off, leaving the patient free from complaint, but continually subject to a relapse. This induces him to be exceedingly cautious to avoid catching cold. But excess of care tenders his constitution to a high degree, and is, as we shall afterwards prove, a very erroneous method of proceeding. In a course of years one fit succeeds another, and the disorder in the mean-time increases in the violence and duration of the fits, as well as in the frequency of their returns. The expectoration from the mucous glands of the lungs, which still continues to relieve at the termination of the fits, becomes itself a very troublesome symptom. The mucous glands are relaxed, and the discharge of mucus greater than natural. Hence the bronchial or air-vessels are frequently obstructed with phlegm, and from this cause the freedom of respiration is disturbed. The patient breathes with unusual difficulty, although
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his convulsive fit be not upon him. When he first wakes in the morning, he has generally a severe fit of coughing, which continues till he has got up the phlegm that provoked the cough, by preventing the free admission of air into the air-vessels. Through the day, at different times, the cough still recurs, but with less violence, and in the evening it is often very teasing and distressing, especially on any sudden motion of the body, or in cold damp foggy weather, which obstructs the exhalation of the perspirable matter from the lungs.

Thus the *humoral Asthma* is united with the convulsive, and both together exist in the same patient. The humoral Asthma is a disorder of the mucous glands of the lungs, in consequence of which they are relaxed, and the discharge of mucus, being unnaturally copious, obstructs the freedom of respiration. This part of the disorder is more constant; the convulsive Asthma is more violent and of shorter duration. The humoral Asthma is more severe both with respect to the cough and difficulty of breathing in winter; but in summer, when the weather is warm, and perspiration free, it often disappears totally between the intervals of the fits of the convulsive Asthma. The convulsive Asthma

Asthma too is sometimes feverer in winter than in summer, especially when combined with the humoral, or with a catarrh. But it often happens that the warm weather affords little or no relief, nay even in many cases it is observed, that the irritability of the constitution and the rarefaction of the blood is so much encreased by the warmth of the weather, that the frequency and severity of the fits are greater in the warm and sultry, than in the cold seasons of the year*. In this case the humoral Asthma is continued on during the summer months by the convulsive Asthma, as a symptom of the natural and critical solution of the fits. But even in this situation of the patient, the symptoms of the humoral Asthma are greatly alleviated by the warmth of the weather, which is by no means constantly the fact with respect to the convulsive Asthma.

Along with or after the convulsive Asthma, either when pure or when complicated with the humoral, there is often a great soreness in the breast, partly from the obstructed circulation, partly from the spasmodic contraction of the

* Floyer takes notice of this fact, and Dr. Cullen also remarks it in his public lectures, and explains it from the rarefaction of the fluids. I have seen many patients who had their severest asthmatic fits in the dog days.

ON THE ASTHMA. 13

the muscular fibres of the air-vessels, and partly from the frequency and severity of the cough *. Sometimes too there are rheumatic stitches in the sides, which are extremely painful and alarming to the patient; but the judicious practitioner will easily distinguish them from internal affections of the breast, by the external soreness, and the acuteness of the pain in consequence of motion.

The frequent returns of fits sometimes cause obstructions in the lungs, which, as the dis-
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* We cannot help remarking here that some people, especially those who are young and strong, cough more frequently, and with greater violence, than they are under the absolute necessity of doing. The old and weak learn to be more cautious. The act of coughing is partly voluntary, and partly involuntary. It is often out of our power to prevent it, but it is likewise often in our power to encrease it. It is this additional part of coughing which I am speaking against, and not that which is involuntary. The last is unavoidable, but the first, when violent, is not only unnatural, but prejudicial to the patient, as it injures the lungs, and assists greatly in exciting pain, inflammation, tubercles, and rupture of blood-vessels. The brute creatures seldom or never cough with greater violence than they can help. It is absurd to strain the lungs and cough very forcibly, with an intention to get up a little phlegm that flicks in the throat. The phlegm remaining awhile where it is, would do infinitely less hurt than the violent coughing. It may give some sense of uneasiness for the time, but it would soon come up more easily of itself by that degree of the cough, which is chiefly involuntary, and therefore unavoidable.

section of dead bodies clearly ascertains, appear full of knots or tubercles. These tubercles are most liable to occur in those who have naturally a narrow contracted chest, in which the lungs have not a free and easy motion. They render the disorder very obstinate; they cause a long continuance of the cough after the asthmatic fit, and frequently end in small inflammations of the lungs, attended with internal pains, difficulty of breathing, feverishness, profuse sweats, and wasting of the flesh.

I have already observed that the humoral Asthma often supervenes on the convulsive. It is necessary also to observe, that the convulsive often attacks those who have long been previously afflicted with the humoral Asthma. Patients subject to catarrhs and winter coughs, during which they expectorate a considerable quantity of thick or frothy phlegm, are sometimes suddenly seized with violent difficulty of breathing, and great tightness over the breast, so as to dread even instant suffocation. This new complaint, after having tormented them for some hours, or perhaps a day or two, leaves them almost as suddenly as it at first attacked them, and they look back with surprise at their happy deliverance from so formidable
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and unexpected an enemy. Their old habitual cough and asthma, with foreness and stuffing in the breast, still remains upon them, but after what they have lately suffered, they bear it without repining. In this manner they continue for some time, till the convulsive Asthma attacks them again, and perhaps with additional violence. Thus, by frequent returns of the fits, the convulsive Asthma becomes habitual to the patient, and he has the misfortune to find himself laboring under a complication of two diseases; the one aggravating the other, and both growing worse.

The convulsive Asthma sometimes attacks persons of a thin spare habit, whose constitutions have been greatly emaciated by a long exposure to causes of general or chronic weakness. In some cases it seizes patients who are robust and full of blood. At other times it occurs in those who are gross, phlegmatic, corpulent; and in such habits it is often very distressing. It is frequently connected likewise with hysterical and hypochondriacal complaints, in irritable and relaxed constitutions. But it will be needless here to enumerate at large the symptoms of general weakness, which may exist along with the convulsive Asthma,

Asthma, or be evidently induced by it. That subject we have already carefully discussed in a pamphlet on Chronic Weakness, which will enable us to avoid many unnecessary repetitions.

It will be sufficient to observe in this place, that the convulsive Asthma, recurring for many years, is capable of reducing the strongest constitutions, and of bringing on the symptoms of general debility. But if it attack a constitution already weakened and exhausted, it is obvious that it will necessarily weaken and exhaust it more. The patient will lose weight, sink from his cloaths, and appear emaciated, especially if the vessels of the lungs are so relaxed that a considerable quantity of mucous matter is expectorated. The stomach and bowels are more particularly liable to be affected in the convulsive Asthma. They are often seized with colic pains, distended with wind, tormented with burning heats*, and agitated with tremulous motions, which give a sensation to the patient of something moving and

* This sensation was so strong in the case of Floyer, that he attributed his Asthma to an inward burning heat.

and fluttering within him*. The appetite is greatly impaired. Sleep is often prevented, or it is disturbed and unrefreshing. The menses are sometimes obstructed; and sometimes they are brought on before the usual period; and when plethora prevails, that discharge is accompanied with relief. The patient is sometimes costive, though sometimes he will have loose stools. The extremities, particularly the arms, shoulders, and upper parts of the body, are often affected with great anxiety and uneasiness. Symptoms of fever are not essential to the disease, though they frequently occur, especially when the humoral Asthma or a catarrh is complicated with the

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convulsive.

* Dr. Cullen has taken much pains to investigate the nature of atony, or debility in the nervous system. He proves, from a variety of facts, that atony is transferable from one viscus to another, as is very evident in the gout, hysterical and hypochondriacal affections, and many other diseases. The Asthma too affords us a striking example of the same. We shall shew afterwards that it often continues to recur from weakness and irritability of the lungs. If at the same time the stomach and bowels are weak, the atony will sometimes affect the alimentary canal, and sometimes the air-vessels. Floyer has taken notice of the fact here alluded to, and has observed, that slight fits of the Asthma often affect the stomach and bowels, and not the lungs. I have, in several instances, observed the atony, in asthmatical cases, to have been transferred to the stomach and bowels, and when those parts were much diseased, the breathing has been better, and *vice versa*.

convulsive. A hectic fever, with a colliquative diarrhoea, faintings, palpitations, violent vomitings, coldness of the extremities, swelled legs, and other dropical symptoms, arising from weakness, relaxation, and obstruction to the circulation of the blood through the lungs, is common in the last stage of the disease*. But a hectic fever indeed will sometimes occur in very irritable and relaxed habits, when no immediate danger is threatened.

Distinction of the ASTHMA.

From the preceding account of the symptoms of the convulsive Asthma, it will appear obvious that the *distinction* of it from every other disease cannot be difficult. The sudden attack of the fits, the short time of their duration, the violence of their symptoms, the state of ease and good health between them,

* Old Asthmias, especially when improperly treated or neglected, cause tubercles and consumptions in lean habits; and in those who are fat and corpulent, dropsies, head-ach, vertigo, apoplexy, palsy, lethargy, and inflammations of the lungs, which prove fatal. Floyer.

Dr. Millar too observes the same, and particularly mentions ruptures of vessels, abscesses, extravasation of serum, spitting of blood and hydrops pectoris, all of which are ascertained by dissection. Vid. Millar on the Asthma.

them, and their returning at intervals, will sufficiently characterize the complaint.

We have observed that the convulsive Asthma is often combined with the *humoral*; but when this combination of the two disorders does not take place, the suddenness and violence of the attack of the convulsive Asthma will sufficiently distinguish it. Should, however, any practitioner, from the inaccuracy of the patient's description of his disease, be in the least doubtful with regard to the first fit, the succeeding one will, in all probability, render the case indisputably clear. At any rate the distinction of those two disorders, though it be matter of moment, yet it is less so than at first sight one would suppose, for, like the different shades of colors, they run almost imperceptibly into each other in all possible degrees, and the cure must be regulated by the general constitution of the patient, and an accurate view of the symptoms of both diseases taken collectively.

With regard to the *pleurisy* and *true peripneumony*, the distinction of them from the Asthma is of the utmost consequence; but when the disorders are pure and unmixed, it is seldom or

never attended with much difficulty. Great pain in the breast, sides, or between the shoulders, a painful, hot, laborious respiration, along with a cough and general fever, will sufficiently denote the presence of a local inflammation*. The inflammation of the lungs or pleura does not attack so suddenly, nor return at intervals like the convulsive Asthma, which, at first, is generally of much shorter duration, and attended with little or no fever. If the convulsive Asthma be combined with a pleurisy or inflammation of the lungs (a case which sometimes occurs) the disease truly puts on a most alarming aspect; for the severity of pain and violent difficulty of breathing, with general fever and a miserable depression of countenance, render the patient a melancholy object of compassion. In this case, as the inflammation is far more immediately dangerous than the Asthma, it is common to give it our first and greatest attention; but the Asthma must not be overlooked or neglected, as it will tend to throw great light upon the general nature and cure of the whole disease, viewed in its complicated form.

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* Sir John Pringle on the diseases of the army.

ON THE ASTHMA. 21

The *false pleurisy*, which is the rheumatism in the muscles of the chest, is easily distinguishable from the convulsive Asthma, by an acute pain in the side, increased by motion and external pressure. Other rheumatic pains in the joints often occur along with it, and discover its nature more fully. The characteristic symptoms too of the asthmatic fit, which have been before mentioned, will put the matter out of dispute. We have observed in the enumeration of the symptoms of the Asthma, that the false pleurisy is frequently united with it.

The *peripneumonia notha*, or false peripneumony, is another disorder, which is sometimes confounded with the Asthma. But Sydenham very properly observes, that the fever, which attends the false peripneumony, is sufficient to distinguish it. The mode of its attack, likewise, is very different from that of the Asthma. It begins often with symptoms which are mild, and apparently without danger; but afterwards it increases gradually, though rapidly, to a very alarming height, and the patient, if he has neglected himself or been improperly treated, is quickly hurried out of life*. But
this

* Vid. Boerhaave Aphorism. § 367, de peripneumonia notha.

this attack, though apparently sudden, is not near so sudden as that of the Asthma, nor does it come on in a similar manner after sleeping. There is too, for the most part, a dull deep-seated pain in the breast, encreased by inspiration and coughing, which does not commonly occur in the Asthma. Those laboring under this species of the peripneumony are generally of a phlegmatic habit, subject to catarrhs, winter-coughs, and humoral Asthmas, and their blood is poor, containing a superabundant quantity of serum. The false peripneumony moreover does not recur at intervals like the Asthma, nor does the chest and midriff seem to the patient to be so fixt and immoveable; but, on the contrary, the lungs are choaked up with phlegm and serous effusions*. In the Asthma the difficulty of breathing often abates considerably, if it do not entirely cease, before much expectoration takes place. In the false peripneumony, a copious expectoration coming on affords great relief, though without any very sudden abatement of the symptoms. Another mark of distinction, which we must mention, is that the first fits of the Asthma are frequently very short, and the succeeding ones gradually encrease in duration;

* Vid. Morgagni de sedibus & causis morborum, tom. i. lib. ii.

ration; whereas the first attack of the false peripneumony generally continues many days, and the recovery from it is much more slow and difficult. If a person, subject to the convulsive and humoral Asthma, should be seized with a false peripneumony, when his convulsive Asthma is not upon him, and afterwards the convulsive Asthma should supervene, the patient is generally carried off in a very sudden manner, by a death sometimes resembling instant suffocation. But so terrible a complication of maladies seldom takes place.

In the *Hydrothorax*, or *dropsy of the breast*, there is often great difficulty of breathing, not unlike an asthmatical complaint, but any one conversant with the disorder will easily know it*. The learned and judicious Dr. Cullen has given the following accurate definition of it. *Dyspnoea, faciei pallor, pedum œdemata, urina parca, decubitus difficilis, subita & sponte ex somno cum palpitatione excitatio, aqua in pectore fluctuans.* These symptoms come on gradually, accompanied with great weakness of the constitution and inability to motion, and the patient has no intermissions, during which he is free from his disease.

* Vid. Van Sweiten. Comm. de Aphorism. 1219.

disease. The Asthma attacks suddenly, but afterwards often leaves the patient sound. The first is a tedious, continual complaint; and generally a fatal one; the last has frequent and often long intermissions. The asthmatic patient, when his fit is off, can, in many cases, use hard exercise and labor; but the patient, who is afflicted with a dropsey of the breast, can never undergo any considerable degree of muscular motion, without the greatest anxiety and oppression. Besides, the chest and midriff do not feel bound and fixt, as in the Asthma; the muscles, belonging to them, being able to act with considerable freedom. The sudden wakings from sleep, with fear and palpitation, (which occur in the dropsey of the breast, and are thought by some to be characteristic of it) are very different from the attacks of the Asthma; for the patient, though troubled with a difficulty of breathing, has yet a much freer admission of air into the lungs. Afterwards, as the disorder advances, swelled legs, a small quantity of urine, a dropical phlegmatic countenance, a wasting of the flesh, and a fluctuation of water in the breast, along with the above-mentioned symptoms, will sufficiently distinguish it. The dropsey of the breast too is not near so much affected

affected by changes of the weather, as the Asthma. If a dropsy of the breast supervene on an asthmatical disorder, it is generally fatal.

With regard to *catarrhal* and *consumptive complaints*, if they be complicated with the convulsive Asthma, the complication must be diligently attended to, as it will considerably influence the cure; but if they occur separately, the distinction of them will be sufficiently evident. The difficulty of breathing in a catarrh or a consumption, is not to be compared with that which occurs in the convulsive Asthma. In the catarrh, attended with a fever, cough, and expectoration of mucus, the chest, if not fully, is yet capable of being very considerably dilated in inspiration, but in the convulsive Asthma, the patient is unable to dilate the chest, and feels as if a great weight was constantly pressing upon him. The pulmonary consumption, which is an ulcer of the lungs, is easily distinguished by the gradual rise and progress of the symptoms, by the cough, purulent expectoration, hectic fever, and emaciated habit.

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So much for the distinction of the convulsive Asthma. If any one should think that this subject deserves a fuller discussion than is here given, the surest way to be perfect in it, is an accurate study of the respective histories of all the different complaints, which bear any, even the smallest resemblance to the convulsive Asthma, along with a steady attention to the general appearance of those disorders, as they occur in nature. Words can never make those minute distinctions, which are very obvious to the eye and other senses. In all asthmatical complaints and other diseases of the lungs, it is very essential to attend most minutely to the manner in which the patient breathes. We should not depend intirely on his representation of the fact. We ought to listen to the frequency of respiration, as well as to the wheezing of the patient, and observe accurately the freedom with which the air can pass into the lungs. We should desire him to make as full an inspiration as he is able, and then take notice of the manner in which the air is expired. We must also attend to the elevation of the shoulders, the labor of respiration, the quick articulation of words, the color and anxiety of the countenance, and the difficulty of bearing a lying posture. Observations,

servations, like these, made with accuracy and circumspection, will greatly facilitate the distinction of the different diseases of the lungs. Joined to those we have already advanced on each particular malady, they will clearly shew, when the air-vessels are suddenly contracted with spasm, or gradually obstructed with phlegm and serous effusions, or when respiration is impeded by the rheumatism in the side, or by an inflammation of the lungs, and an extravasation of red blood into the cellular membrane of that organ.

Causes of the ASTHMA.

Having distinguished the complaint, we must next inquire into the *causes* of it; an inquiry of the utmost importance.

With regard to the *proximate cause*, physicians seem perfectly agreed that it is a sudden contraction of the muscular coats of the air-vessels of the lungs, which they generally term convulsive or spasmodic*. That the air-vessels have muscular fibres, capable of muscular contraction, anatomists sufficiently demonstrate. In the convulsive Asthma, the

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suddenness

* Floyer, p. 43.

suddenness of the attack, the short duration of the fit, and the recovery of the patient, before any considerable evacuation of phlegm has taken place, prove clearly the nature of the disease. There can be no fixt obstruction at its commencement, for in that case the termination of the fit would not be so speedy and so perfect. But if it be once admitted, that a spasmodic contraction of the air-vessels is the proximate cause, then every idea of difficulty in the explanation of the chief symptoms of the Asthma is removed. All convulsive disorders are sudden in their attack, and they are often as sudden in their termination. When the muscular fibres of the air-vessels are contracted, along with the midriff and the muscles of the chest, (the contraction of which last sometimes occurs) the free admission of air into the lungs is prevented, and the patient labors for breath. Expiration and inspiration are slow, because the parts, performing the function of respiration, are not able to act, but with the utmost difficulty. When this spasm is removed by proper remedies, the patient, after the expectoration of a little phlegm, feels himself almost restored to perfect health; for the cause being obviated, and there being no fixt obstruction in
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the lungs, the symptoms of the disease totally disappear.

With regard to the habitual cough, shortness of breath, and expectoration of phlegm, which sometimes continue to disturb the patient in the intervals of the fits, they arise from a complication of the humoral Asthma, along with the convulsive. Those symptoms, though they often precede the convulsive Asthma, yet they seldom occur as a consequence of it, till the disease be of considerable standing. They denote a great relaxation of the mucous glands of the lungs, which, together with an increased secretion of mucus, may be considered as their proximate cause.

Hence the proximate cause of the convulsive Asthma, when complicated with the humoral, (which, as we have observed, is the most common state in which it appears) is a *spasmodic contraction* of the air-vessels of the lungs, preceded and followed by a *relaxation* of the mucous glands, with an *increased secretion* of mucus. Tubercles in the lungs are frequently a concomitant symptom, or a consequence of severe and repeated attacks of the convulsive Asthma; and whenever they occur, they

they render the disease of a more obstinate nature; but they are by no means essential to it, and therefore cannot be viewed as forming any part of the proximate cause.

The *remote causes*, which comprehend both the *predisposing* and the *occasional*, are next to be considered. These, operating together, produce the proximate cause, with which the disease necessarily exists. The occasional causes seldom or never produce the complaint, unless there be a predisposition in the constitution, either natural or acquired. And where there is a predisposition there will be no disorder, if the body be not exposed to the action of the occasional or exciting causes. This is a fact, often mentioned and well established among Physicians, and the knowledge of it is of great consequence to society. Hence we are taught not to induce a predisposition, where one exists not in the constitution; and where one exists, the greatest caution is requisite to avoid the occasional causes, and then the predisposition will be attended with much less, if any, inconvenience.

The chief predisposing causes of the convulsive Asthma, are a *narrow contracted chest*,
morbid

morbid irritability of the lungs, and pulmonary obstructions in consequence of tubercles, either scrophulous or formed by repeated catarrhs, winter coughs, plurifies, and peripneumonies.

A *mal-conformation* of the chest may either be natural, or occasioned by some accident, or by mismanagement. If it be natural, every one ought to endeavor to submit willingly, if not cheerfully, to the dispensations of providence. If it be accidental, we may reflect that it is not always within the reach of human wisdom, either to foresee or to prevent it. But if it be brought on by mismanagement, experience ought to give us knowledge, and knowledge will naturally point out to us the means of preventing the like future inconveniencies.

In our earliest infancy, the bones of the thorax or chest, being very gristly and compressible, are frequently injured by the *ignorance or carelessness* of nurses. The ribs have often been pressed inward, and the marks of fingers have, on dissection, been discovered. A nurse should never take hold of an infant by the breast, and throw it very forward upon the hand, for in this case the weight of it is supported

supported principally by its ribs, which being in a great measure formed of gristle, are consequently unfit to bear any compression. Nurses, in holding infants, should be cautious to place the hand below the ribs or chest, and then they will easily avoid the inconvenience here mentioned.

Another cause of bad conformation of the chest in children, is the too early use of *stiff stays*, which, if drawn tight, prevent the free dilatation of the chest in inspiration, alter in time the shape of the body, and greatly impede its natural growth.

A third cause of deformity in those parts, is the *want* of a *sufficient* quantity of *mother's milk*, along with bad nursing, which weakens the infant and brings on the rickets. In this case the bones lose their wonted firmness, and unable to support the weight of the body and the action of the muscles, bend from their natural position, and render the chest too strait for the ordinary functions of respiration.

The second predisposing cause, is *great irritability* of the lungs, which is either natural
or

or acquired. The lungs, generally speaking, are not a very irritable part of the body, but on the contrary are much less so than many other of the internal organs, as, for example, the heart, the stomach, or the bowels. Yet, notwithstanding the truth of this observation, there are several exceptions, in which the lungs are uncommonly irritable in their natural state; and whenever this fault takes place in the constitution, the patient is more prone to asthmatical complaints.

But the cases of great natural irritability in the lungs are few, in comparison of the vast number of cases, in which the lungs acquire a high degree of irritability.—*Plethora*, or a *superabundance of blood*, often lays the foundation, not only of a general irritability of the nervous system, but of a particular one in the organs of respiration. The whole mass of blood circulates through the pulmonary vessels, as often as it circulates through the other parts of the body. An unnatural quantity of blood, therefore, must frequently be found very oppressive to the lungs, in which the vessels are so large and numerous.

But

But the chief cause of this acquired irritability is *artificial external heat*, accumulated about the body by means of *fires, cloathing, and houses*; and as it is so *powerful* and so *frequent a cause*, it is requisite that the reader's mind should be impressed with a just notion of its importance.

The power of heat in exciting irritability, is a fact well established in the schools of physic. Cold diminishes the sensibility of the nervous system, and heat encreases it*. The heat of beds†, fires, stoves, hot rooms, too many cloaths, &c. is more pernicious in its effects, than the natural heat of the climate. The nerves, blood-vessels, and muscular fibres of the lungs, are very much relaxed by breathing a warm air, and this relaxation is necessarily productive of irritability. A warm artificial atmosphere causes a copious perspiration, from the exhalant arteries of the lungs. If in this condition of the body cold

* Vid. Gaub. Institut. Pathol. Med. de nocivis atmospheræ potestatibus. § 424. 3.

† Hippocrates says, Longiores vero somni calefacientes colliquant carnem, & corpus diffundendo resolvent et imbecillum reddunt. De victus ratione sanorum Lib ii. cap. 10, tom. vi. page 474.

be applied, that perspiration is suddenly checked, the relaxed orifices of the exhalant arteries are contracted, and a general constriction of the vessels of the lungs is induced. There are some, whose robust constitutions can bear changes like these with impunity, but many will be most essentially injured by them, and severely afflicted with the convulsive Asthma, complicated with the humoral. Their lungs will become suddenly contracted with spasm, and afterwards obstructed with phlegm, which will impede respiration, and bring on a troublesome cough. Hence the danger of breathing a warm air, either by day or night, in small rooms with large fires, which is so frequently productive of asthmatical complaints.

The lungs are more affected by sudden changes from heat to cold, than almost any other part of the body. Hot air enters into the air-vessels of the lungs, which are defended only by their natural mucus, and cold air has free access into the very same parts. There is nothing, which art can interpose, to prevent the pernicious effects of both heat and cold, thus alternately applied. It is not so with the surface of the body. The cloaths

which we commonly wear, defend the external parts both from excess of heat and from excess of cold. The hurtful influence therefore of sudden changes is not so great upon them, as upon the air-vessels of the lungs.

Now, in order to confirm this argument still more fully, it may not be improper to quote some of the most respectable authorities in medicine, in proof of the pernicious effects of artificial heat.

The learned Gaubius, when speaking of the hurtful qualities of the atmosphere, points out in a masterly manner this important truth. He observes, that warm air is not only very injurious to the nervous system, the stomach and bowels, and the organs secreting the bile, but also to the lungs, whose functions it disturbs in various respects*. Van Sweiten, the able commentator of the great Boerhaave, labors to convince mankind of the same important fact. The late eminent Dr. Gregory, (whose name I shall always mention with the deepest sentiments of esteem and respect) spoke warmly, in his public lectures, on this subject. I have often heard him argue against the

* Vid. Institut. Pathol. Gaub. § 422.

the abuse of heat in a manner which carried the strongest conviction along with it; for when the mind is thoroughly convinced by facts and observations, it generally imparts its sentiments to another with energy and perspicuity. Dr. Whytt, a late eminent professor of medicine at the University of Edinburgh, was fully of this opinion. Dr. Cullen likewise, whose most extensive genius, long experience, and unwearied industry, justly entitle him to the highest honors of his profession, is of the same way of thinking, and considers artificial heat, when applied too freely to the body, as being very injurious to the lungs, as well as to the whole constitution.

But there is no need to dwell longer on authorities, when facts evidently stand forth in proof of the doctrine here advanced. It having been observed by many eminent physicians, that none were so liable to catarrhs, winter coughs, Asthmas, and consumptions, as those whose constitutions were become tender by an imprudent exposure to heat*; I was resolved to examine accurately into this subject, and had the satisfaction of finding that they had truth indisputably on their

* Dr. G. Fordyce, in his most excellent public lectures on the practice of physic, gives his opinion fully on this head.

their side. Let us appeal to the knowledge and experience of the world, and, as a matter of fact, let us ask who are most liable to be affected with cold, and consequently troubled with coughs and asthmatical complaints? The answer is obvious—they who are most confined to close warm rooms, and whose constitutions are made tender by excess of heat. In my attendance at the Royal Infirmary at Edinburgh, and at St. Thomas's Hospital in London, and in my private practice, as well as that in the York County Hospital, I have met with many asthmatical patients, and as an undisputable fact I assert it, that far the greatest number of them confessed, that they were always fond of a good fire, a warm room, much cloathing, and a warm bed, in consequence of which, cold, damp, and changeable weather affected them most severely.

Besides, if we reflect on the different occupations of the lower class of mankind, we shall find none so frequently and heavily afflicted with the Asthma, as those who are exposed to the greatest heat. What set of people are more subject to coughs and Asthmas, than cooks, bakers, and blacksmiths? Who is ignorant of the

ON THE ASTHMA. 39

the danger of boiling soap, brewing strong liquors*, making malt, working in forges†, purifying sugars, and such like employments, in which the laborer is necessarily exposed to heat in excess. This class of men, pale, fallow, and often emaciated, is more subject to the Asthma than any other.

Knots or tubercles in the lungs, we have mentioned as the third predisposing cause of the convulsive Asthma. They frequently arise from a scrofulous habit. They are principally seated in the lymphatic glands of the lungs, and are often accompanied with glandular swellings in the neck and other parts of the body. Sometimes they are occasioned by inflammations of the lungs and obstinate catarrhs. Obstructions of this nature induce great irritability of the parts affected, and are a powerful predisposing cause of asthmatical complaints, which, in this case, end often in ulcers of the lungs.

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* I was some time ago in conversation with a man, who had been a brewer for thirty years. I asked him how that business agreed with his health, and he said very well. Then I asked him if he thought it a healthful business, and he said it was not, for though he had escaped an Asthma, yet that was the complaint which killed most of them.

† Bonet. Sepulchretum. Lib. ii. sec. 1. page 502.

The frequency and danger of these pulmonary obstructions, lead me again to remind my reader of the pernicious consequences of excess of heat. Weak serofulous habits should not be rash in exposing themselves to an unaccustomed and dangerous degree of cold. But I will venture to affirm, that if their constitutions are relaxed and made tender, by wearing a load of cloaths, by living in small warm rooms, sitting near large fires, lying very warm in bed, with the curtains drawn close*, &c. they will never be able to bear the changeable and uncertain atmosphere of this climate, without running great hazard of being severely, if not dangerously, afflicted with complaints of the lungs, either catarrhal, asthmatical, or consumptive.

With regard to those cases of tubercles, dispersed through the substance of the lungs, proceeding from catarrhs and inflammations, they also frequently owe their origin to a heated atmosphere. Many cases of the catarrh and peripneumony arise from the lungs having been

* Nihil autem magis laxat corpora, quam tepor lecti, dum somno largiori indulgent ægri. Hærent enim sic in proprio vaporum de corpore exhalantium balneo. Van Swieten, vol. I. page 45.

been made irritable by heat, and then being suddenly acted upon by cold. But cold alone would generally have no such effect, unless heat had been previously applied. When I speak of cold as having no such pernicious effect, I mean a cautious, not a rash application of it.

It is an undoubted fact, that man in his natural state, and in a state of health, is one of the most hardy of all living creatures, and capable of bearing the greatest severities of weather with impunity*. An illustration of this fact is observable in the Highlands of Scotland, where the peasant, surrounded by his Scotch plaid, lays himself down in the winter season under the edge of a rock; sleeps sound through the night in the midst of his herds, and wakes in the morning chearful and refreshed. Not only uncultivated nature, but times of war afford numerous examples of the same kind. How often, alas, have the British and American troops, during the late unhappy disturbances, undergone the greatest hardships of weather. If sleeping in wet cloaths on the cold ground in misty nights, was, as some imagine, to be always attended

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* The late Dr. Gregory's public lectures on the institutions of medicine.

with bad effects, there would scarce be a veteran soldier capable of bearing arms. As facts like these, in the history of mankind, are infinite in number, it is unnecessary to dwell longer on the enumeration of particular instances.

But if this be a true state of the case, (which will not be denied) can any one be so absurd as to suppose, that because the shepherd and the soldier are able to bear, with chearfulness and safety, the cold rain of a winter's day, others likewise, in a different situation of life, whose nerves are made tender and irritable by excess of heat, will take no harm from undergoing the same severity of weather? The first have custom, which is justly termed our second nature, on their side; the latter, as well in the middling as in the higher stations of life, have the greatest delicacy of constitution.

Though we wish to inculcate an useful maxim on the world, yet we would cautiously avoid extremes, considering them as highly dangerous. Extremes, nevertheless, are relative terms, and difficult to be defined. A degree of cold, which is dangerous to one person, is perfectly harmless to another. Every
body,

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body, therefore, should be guided by his previous habits, as well as by the natural vigor of his constitution; and endeavour to be able to bear the unavoidable hardships of his occupation, that he may, if possible, follow it with safety.

So much for the predisposition of the body, as favoring asthmatical complaints. Some may, at first sight, think that one or two predisposing causes are overlooked, viz. *corpulency* and an *hereditary disposition*.—With regard to the first we answer, that corpulency is connected with plethora, of which we have spoken as powerfully creating irritability of the lungs. A corpulent person is always full of blood. With regard to hereditary disposition, we admit the fact, that the Asthma is often an hereditary disease; but at the same time must observe, that we have already fully considered it under mal-conformation of the chest, scrofulous tubercles in the lungs, and a peculiar natural irritability of them, all of which defects in the constitution are hereditary.

Having considered fully the principal predisposing causes of the convulsive Asthma, we proceed to enumerate the *occasional*. These

are cold, moisture, sudden changes of weather, dust, metallic fumes, smoke and other particular smells, mephitic vapors, evacuations, great fatigue, neglect of exercise, shouting and all strong exertions of the voice, certain disorders in the constitution, anger, joy, surprize, fear, grief and other depressing passions, excess in venery, and intemperance in diet.

Concerning the effects of cold, we have not much to add. It is evident that an *unaccustomed* degree of cold will bring on a fit of the Asthma, as is clearly proved by daily experience. *Moisture*, joined to cold, will still more certainly produce that effect. For this reason, cold foggy weather is found very unfavorable to the asthmatical. In Asthmas arising from this cause, perspiration is obstructed, and symptoms of a catarrhal affection often precede the fit, such as feverishness, a quick pulse, pain and stuffing in the head, hoarseness, a mucous discharge from the nostrils, and a cough with little or no expectoration. Wet feet, damp linen, damp cloaths, houses, the walls of which are not perfectly dry, wet floors, cold rooms to those who are accustomed to warm ones, an unusual stream of air against any particular part of the body,

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fenny countries, all sudden changes of weather*, cold easterly and notherly winds, riding or walking in the rain, have all been observed to induce asthmatical complaints in habits, where the predisposition existed.

But cold and moisture, as we have before observed, have a much greater effect on the weak,

* Floyer observes, that though his fits recurred at no certain times, yet he generally had (to use his own expression) an inclination to one before rain, snow, or frost. When he had an unexpected fit, a change of weather immediately succeeded. If there had been a frost for some time, a thaw often occasioned a fit. A sudden change too of the wind into the East, had the same effect. Sudden changes of the air in the spring and fall, are very often productive of fits, especially when people make alterations in their cloaths. Asthmatics generally breathe with more difficulty in mountainous situations, where the air is light; and for this reason likewise a fit will frequently come on either just before, or during a storm of thunder and lightening. Floyer justly observes, that the moist state of the air, which for two or three days precedes rain, affects the asthmatic patient more severely than the rain itself when it falls. Changes of the weather from a dry state of the air to a wet one, at the changes of the moon, have considerable influence on asthmatics; and sometimes fits will occur at the full and change of the moon, when we can assign no particular reason. Those winds likewise, which come to us loaded with vapors, particularly the South and East, are often very prejudicial; and also great winds and storms, though without rain, will frequently bring on a fit. Very hot weather too agrees ill with asthmatics, and, though clear, will often induce a severe attack of the complaint. We have already remarked in the history of the disease, that the most violent fits of the pure convulsive Asthma occur in the dog-days.

weak, the delicate, and tender, than on others who are more hardy, of robuster constitutions, and not become irritable by excess of heat. The extreme of caution to avoid cold and moisture, is almost as fatal to the human frame, as no caution at all; for every imaginable caution, in the imperfect state in which we are placed, will not be sufficient to defend us from the injuries we strive to avoid. Cold and moisture will penetrate into the very inmost recesses of our houses, and in spite of walls, hangings, curtains, cloaths, and fire, will gain admittance, and act powerfully against us. Moderate caution is better than excessive caution, and we should learn to bear what we cannot shun,

Dust, metallic fumes, smoke, particular smells, and mephitic vapors,* are often occasional causes of the Asthma. For this reason millers, flax-dressers, maltsters, purifiers of ores, chymists, who prepare remedies of a metallic nature, which

* This may be one reason why London and other large cities, in which there is a great deal of smoke constantly in the surrounding air, are so very offensive to many asthmatical patients. I have known several, living a mile out of town, who told me that in the winter, when they approached the city and came into its smoke, they were immediately seized with shortness of breath and a fit of coughing.

which subject the operator to metallic fumes, whether of mercury, lead, arsenic, antimony, &c. are very subject to asthmatical complaints. Certain smells too are particularly disagreeable to some. Hence it has been frequently remarked, that the smoke of grease, of candles, and tobacco, is very noxious in the Asthma; as also the fumes of fermenting liquors and of burning charcoal, partly from their smell, and partly from their poisonous mephitic quality. Many strong-scented and sweet odors, arising from essential oils and odoriferous plants, are very offensive to some. Sulphureous smells likewise are found prejudicial. A gentleman of my acquaintance was drying a little gunpowder in a brass pan, over a stove in the kitchen. There were present an old woman and a cook-maid, both subject to asthmatical complaints. The smell, emitted from the gunpowder, was so strong, that they were both of them affected with straitness in the breast, and difficulty of breathing, particularly the old woman, who afterwards was troubled with a severe fit of coughing, and had a very bad night. The gentleman himself felt little or no inconvenience. I am intimately acquainted too with a patient, who is at times troubled with the pure convulsive Asthma,

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from sleeping in strange beds, in which the feathers are new and emit a peculiar smell, though often in so slight a degree as scarcely to be perceived by another person. This gentleman consulted me some years ago, and from accurate observation and repeated fits, the fact was proved beyond a doubt. The beds, which brought on the Asthma, were perfectly dry, and in constant use. If the bed was changed the fit did not come on, though the patient continued to sleep in the same room, and with the same bed-cloaths.

Evacuations, great fatigue, sudden and violent exertions of strength, and also the neglect of exercise, are to be considered as exciting causes. The convulsive Asthma is a nervous complaint; and nervous irritable habits are apt to be much affected by evacuations, whether sweating, purging, or blood-letting, but particularly the last. Hence the ague, convulsions, hysterical affections and epilepsy, which are evidently diseases of the nervous system, are sometimes brought on, like the convulsive Asthma, by sudden depletions of the vessels, which weaken the system. Great fatigue too, all quick and violent exertions of strength, induce weakness and depression
of

of the nervous power, and consequently act as occasional causes. Violent running, or stage-dancing, is justly thought by many to induce asthmatical complaints, as it strains and oppresses not only the air-vessels of the lungs, but also the blood-vessels, in consequence of overpowering them with too quick a return of the blood. It seems highly probable that such violent muscular motion may greatly injure respiration and induce asthmatical disorders, particularly in those who have full habits or weak lungs*.—Neglect of exercise, though slower in its operation, is as destructive a cause as too great fatigue, for it is a very frequent cause of bodily weakness. Those who neither walk, nor ride, nor use any other regular exercise, are often troubled with great irritability of the nervous system, which renders them sub-

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* Horses indeed are often observed to become asthmatical, or broken-winded, in consequence of quick running or violent strains. Floyer mentions a broken-winded horse which was dissected, and the lungs were found bigger than natural, and the air-vessels on their external surface were so much weakened and enlarged, as to resemble, when inflated, small tumours, which did not readily subside.—Bonetus, in his *Sepulchretum*, mentions a case of dyspnœa in a patient, "*a pulmone maximo,*" and another of an Asthma, "*ab enormi pulmonum magnitudine lutulento humori infarctorum.*" Lib. ii. sec. 1. page 308.

ject to more frequent and violent returns of the Asthma.

Shouting, vehement speaking, singing, and all strong exertions of the voice, are very hurtful in asthmatical disorders, and have frequently acted as occasional causes. For this reason, all those professions which require public speaking, such as the law, divinity, &c. are injurious in the Asthma, especially when it is accompanied with tubercles and obstructions in the lungs. I may add too cryers in courts, bell-men, auctioneers, &c. who are all sufferers from the same cause; and the more vehement their shouting, the more dangerous and destructive it is to the lungs. Asthmas in people of such low occupations, in whom they are often neglected, are very liable to end in consumptions.—Singing and all strong exertions of the voice strain the lungs, and where there are tubercles and obstructions, they frequently induce partial suppurations*, which are increased to a fatal degree by the same cause continuing to act.

Various diseases of the body affect the lungs, and act in predisposed habits as exciting causes.

Catarrhs,

* Vid. Mudge's ingenious Treatise on the Catarrh.

ON THE ASTHMA. 51

Catarrhs, winter coughs, pleurifies, and inflammations of the lungs, often leave that organ in so weak and irritable a state, that the convulsive Asthma supervenes. Cutaneous eruptions, itch, erysipelas, gout, &c. when repelled by improper treatment, will sometimes throw the lungs into violent convulsive affections. Obstruction of the menses, suppression of the hemorrhoids, drying up of old issues or ulcers of any kind, are frequently observed to have the same effect. Small stones or calculous concretions, which the lungs, as well as every other part of the body, are liable to be affected with, have been found exciting causes of the Asthma*. But it would be both endless and unnecessary to enumerate every complaint which the Asthma has been observed to follow, such as fevers, intermittents†, small-pox, measles, dropries of the breast, polypuses in the heart, the angina pectoris, and a variety of others; and more especially as the Asthma,

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* Vid. Morgagni de. Caus. & Sed. Morb. Tom. I. lib. ii. page 129.

† Floyer thinks that intermitting fevers often occasion the Asthma, and produce fixt periods. He has the following words. "About eight years since I had an intermitting fever, with swooning fits every afternoon. To this I impute the settled periods of the Asthma."

so induced, is often symptomatic only of those diseases which require a particular treatment, and one very different from that which is proper in the Asthma itself, when considered as an original and primary affection.

Anger, immoderate joy, surprise, too close application of mind, fear, grief, anxiety, and other depressing passions, have frequently been exciting causes of the asthmatic fit. They weaken and disorder the nervous system, increase its irritability, and render it more susceptible of nervous affections.

Excess of venery, and intemperance in diet, are the last occasional causes which we shall mention. Too much venery exhausts the nervous power in a very high degree; it is often accompanied with nocturnal watchings, and is found, in weak and relaxed habits, to be a frequent cause of the asthmatic fit.—Intemperance in diet comprehends gluttony and drunkenness, both of which are very hurtful to the asthmatical patient, and often excite fits, which otherwise would not, in all probability, have come on at that time. Intemperance injures the constitution two ways. First, It creates plethora or fullness of blood, which,
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as we have observed, is a common and very powerful cause of irritability of the lungs. Patients of this order seem to be of full habits, corpulent, or inclining to corpulency, with a red and often a bloated complexion. Secondly, Excess in eating or drinking loads and oppresses the stomach, prevents the free descent of the midriff in inspiration, occasions flatulency, indigestion, and sickness, and thus favors greatly the returns of asthmatical complaints. Heavy suppers in particular have always been found very hurtful to people who are subject to the Asthma, and have often been the exciting cause of the fit. Excess in the use of ale, wine, or spirits is a very common and powerful occasional cause of the Asthma, for it weakens the whole constitution, destroys the stomach, and induces a high degree of irritability. As the stomach is one of the most irritable organs of the whole system, and more intimately connected with the brain and nerves than almost any other; it cannot be in the least surprising, that whatever disorders the stomach, should in some measure disorder the whole system, and be so often observed to induce the asthmatic fit.

Prognostic

Prognostic in the A S T H M A.

With regard to the *prognostic* in the Asthma, there is no occasion to say much. Every body knows that an Asthma is a very obstinate complaint, and one which it is difficult to cure; but yet, perhaps, not altogether so difficult as some have represented it. It is true indeed that to compleat a cure is a work of time, and requires the greatest steadiness and perseverance in the patient, both with respect to remedies and regimen. But who is there so insensible to the troublesome and highly-distressing symptoms of an Asthma, as not willingly to undergo many restraints in their pleasurable pursuits, as well as adhere steadily to a proper course of remedies for a sufficient length of time, in order to be restored to a state of health? When one fit is removed, the cure is not to be expected without relapses; but if those relapses be less frequent, and the fits less violent, the practice proves itself to be successful; and doubtless, a cure, in several cases, may by time and perseverance be compleated.

The obstinacy of the disease is to be estimated from the violence and duration of the symptoms,

symptoms, the age of the patient, the condition of his constitution, the nature of the predisposition, and the power of the exciting causes. If the symptoms of the spasmodic affection in the lungs run high; if the disorder be of long standing, and, when once excited, continue for several days; if the returns of it be frequent; if the lungs be greatly obstructed with phlegm at the termination of the convulsive fit, and an obstinate cough remain during the intervals, with a laborious respiration, and a copious expectoration of mucous matter, the cure is difficult, tedious, and uncertain. Tubercles and obstructions in the lungs, and a mal-conformation of the chest, joined to a debilitated constitution, in a patient whose conduct has always been irregular, and whose habit of body is scrofulous and consumptive, are symptoms of a most unfavorable nature.

If, on the contrary, the disorder be recent; if the patient's constitution be not greatly impaired; if there be no natural deformity in the chest; if respiration after the termination of the fit be free, and the cough with expectoration of phlegm not violent, nor obstinate in its duration; if the occupation of the person

son be not injurious to the lungs, or, if so, can be easily relinquished; and if the lungs be not obstructed with tubercles, either in consequence of a scrofulous habit, or repeated inflammatory affections, the case bears a favorable aspect, and may in all human probability be frequently treated with success.

A critical evacuation, as a diarrhæa, ulcer, or copious urine, has been sometimes observed to prevent a fit of the Asthma. A dysury, or swelled legs, relieve some. With regard to a diarrhæa, if it be moderate, and the constitution not too slow to bear the evacuation, it may be allowed to continue awhile; but if the patient be thin and weak, it is safer to check it by the use of opiates and gentle astringents.

Floyer observes that old asthmatics are subject to the jaundice, stone and gravel, rheumatism, and diabetes, which last, when it stops, is frequently followed by a dropsy in the breast. The other diseases to which old asthmatics are particularly liable, were mentioned when we were giving the history of the Asthma. It is obvious to common sense, that if an old asthmatic become consumptive, dropical,

dropfical, or apoplectic, the case is desperate. A peripneumony too, combined with an Asthma, is generally fatal. When infants are seized with the Asthma, it often ends in suffocation, especially if powerful means for the removal of it be not applied at its commencement. Old asthmatics, it is well known, are very liable to severe complaints in the stomach and bowels, from weakness and irritability; such as a bad digestion, flatulency, pains, burning heats, disagreeable prickling sensations in the abdomen, with lowness of spirits and disturbed sleep. We have before observed, that when those complaints in the intestinal tube are the severest, the Asthma is frequently in its mildest state; and, on the contrary, when the Asthma is the most troublesome, the stomach and bowels are less violently affected. Old obstinate cases of the Asthma, which cannot be cured, may often be relieved by the application of proper means, and life not only be prolonged, but (what is of greater importance) rendered much more comfortable.

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The Method of CURE.

The method of cure falls next under our consideration; in speaking of which we shall endeavor to be concise, without, at the same time, omitting any thing which may be of consequence to the successful treatment of the disease. As truth and fidelity in the relation of facts ought always to be attended to above every thing else, the reader will not be surprized to find me recommending some means of cure which are not commonly attended to, and omitting others as useless or pernicious, which have been long known and employed as fashionable remedies in the routine of practice.

From the history of the Asthma which we have already given, it will appear evident that the method of cure divides itself into two distinct parts;

First, During the presence of the fit; and
Secondly, During the interval, with a view to prevent relapses.

PART I.

During the presence of the fit, the *curative indications* which most naturally occur without any studied refinement, are

To

To take off the spasm from the air-vessels of the lungs;

To promote the expectoration of mucus;
and

To mitigate urgent symptoms.

Having laid down those three general indications of cure, we shall proceed to the examination of particular remedies, which, by their proper qualities, are capable of fulfilling them; and point out their mode of operation as distinctly and intelligibly as the nature of the subject will admit of. We shall not first mark the indication, and then subjoin each remedy which might properly be employed to answer that indication, because, by this mode of procedure, there would be a great repetition of remedies, as one remedy will sometimes be found to answer two or more indications of cure; but we shall enter immediately into the consideration of particular remedies, and point out, in one comprehensive view, the mode of operation, by which they fulfil the indications above laid down.

Before we proceed to particular remedies, it may not be improper to say a word or

two on the *regimen* of asthmatical patients when in the fit.

It is agreed on all hands that the *greatest abstinence* is necessary, particularly from aliment which is flatulent, viscid, and difficult of digestion, such as *peas, beans, jellies, butter, several young meats, &c.* Floyer indeed forbids all *flesh meat* on pain of suffocation, or a continuance of the fit. He advises *fasting*, except a *little toast*, or an egg with *vinegar*, at noon or night, and very properly condemns the use of *fermenting wines, mead, sweet ptisanes, frontiniac, bottled ale*, and such like *flatulent liquors*. *Toast and water alone*, or *with acids*, or with a small quantity of *sal-prunell, nitre, or sal-ammoniac*, is recommended by him. *Milk and water, or honey and water*, agree with some. If the patient be low and require a cordial, a little of any *good old wine*, as *port, madeira, sherry, &c.* may be given. If all wines turn sour on the stomach, a *small quantity of spirits* in that case may now and then be used along with the toast and water. *Good cold small beer* may be allowed to some, though it will not agree with all. Floyer mentions *vinegar, or verjuice and water*, as a convenient liquor for asthmatics. But in all those cases the patient's age, constitution, and former habits

habits should be considered, and the practice regulated accordingly. Toast and water, cold and acidulated, is certainly a very proper liquor for the young and strong, whose constitutions are full and inflammatory; but the infirm and aged must be allowed the moderate use of wine or spirits diluted. In like manner acids sometimes disagree with the stomach, and in those cases (however serviceable they may be found in others) it would be highly absurd to make use of them. But we shall speak more particularly on the subject of diet in the second part, which treats of the cure during the intervals of the disease.

With regard to air, as subservient to the purposes of respiration, we may observe that the fits are generally much worse in a *town* than in the *country*, where the air is purer and not so thick. There are, however, exceptions to this, for some patients are better in London than in the country, and some are better in Holland than in a clearer air. In large towns patients are less exposed to changes of weather than in the country, and this may be one reason why the country disagrees with a few asthmatics, whose constitutions are tender and unable to bear the smallest changes of weather. All *exercise* in
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the fit is dangerous, and therefore must be avoided. A *cool room*, at that time, is absolutely necessary; and there should be a *free circulation of fresh air*. Floyer is particularly strong in his recommendation of this, as a matter of the greatest consequence. He found that a *warm room*, as well as a *warm bed* or *warm drinks*, increased the violence of the fit. He further adds, that "asthmatics can bear with impunity much cold, on account of the expansion of spirits." I believe the fact, because he spoke from great experience both in himself and others, and because it coincides with daily observations, but his reason for it I do not understand. Patients, nevertheless, whose constitutions are tender, should not expose themselves *suddenly* to an *unaccustomed* degree of cold; for all changes of this nature should be gradual,

In the asthmatic fit, the difficulty of breathing is often so great, that the patient cannot bear an horizontal posture, and therefore he is obliged to sit up all night on his bed or in an armed chair, where he finds ease by leaning forward. This last was Floyer's method, particularly for the first night, and in the summer season. The wearing apparel at this distressing

treffing juncture should not be strait and confining, but loose and easy. The second night Floyer advises the patient to endeavor to lie down to sleep, with his head and shoulders raised high. He should not be loaded with bed-clothes, for they would oppress him, and obstruct respiration. Some months ago I visited a patient whose breathing had long been so laborious, that he had not lain down at nights for fifteen years successively, but rested in an arm'd chair, leaning forward on a stick.

Having premised these few remarks on regimen, we proceed to speak of the *particular remedies* which are used during the fit.

When first called to the asthmatic patient, the practitioner should consider the state of his constitution respecting *plethora* or *fulness* of blood; for in full habits the moderate use of the *lancet* is absolutely necessary, and the more so, the nearer we are to the commencement of the complaint. For this purpose the pulse should be carefully examined respecting its strength, frequency, and hardness. Strength, without frequency, that is, a pulse strong and slow, does not indicate bleeding in the same degree, as if it were strong and frequent.

But

But if in a strong and frequent pulse there be also an evident hardness, the indication for blood-letting becomes more urgent. The pulse, however, is not a steady guide in this disease, for it is subject to great irregularities in consequence of the contraction of the lungs, and the difficult passage of the blood through the pulmonary vessels. From this cause it often happens that the pulse is small, frequent, irregular, and intermitting in full and plethoric habits, in which blood-letting is absolutely requisite*.

To distinguish, therefore, rightly in this case, other circumstances must be taken into consideration to direct the prudent practitioner. The former state of the patient's constitution must be attentively enquired into, respecting the condition of his digestive organs, and the quantity of food that he usually consumes. Add to this the degree of exercise and bodily labor to which he is accustomed. For if a man have a good appetite and a sound digestion, supported by moderate

* It need hardly be observed, that in some people the artery at the wrist, which runs along the radius, and which is usually examined when we feel the pulse, is uncommonly small, and scarce to be felt, even in very full habits.

rate exercise or labor, the fibres are commonly firm, and the vessels more vigorous, elastic, and well filled with blood. At the same time the physician, for further security, should observe the patient's countenance and general habit of body respecting fulness and corpulency, as well as the natural heat and firmness of the muscular flesh. With regard to the countenance, however, I must remark, that it is a fallacious sign during the existence of the Asthmatic fit; for the circulation through the pulmonary vessels being impeded, the course of the blood to the left ventricle of the heart, as we have before said, is greatly obstructed, which sometimes causes the countenance to appear bloated, or even blackish, in people who are naturally of a pale complexion. To avoid being deceived by this appearance, a prior knowledge of the patient is of great service, and where that knowledge is wanting, an enquiry from intelligent friends concerning his usual complexion, and the difference which takes place, will afford proper and useful information.

Besides the countenance, the external heat, and the firmness and elasticity of the fibres, the practitioner must weigh, with scrupulous exactness, the symptoms of the disease, both

as to number and violence, and more especially examine whether there be a disposition to any inflammatory affection of the lungs or pleura. For this reason particular observation is requisite to the fever, cough, difficulty of breathing, suffusion of the countenance, and fulness of the veins about the head, along with stitches and fixt internal pains of the breast, as these symptoms indicate an inflammatory state of the lungs, and demand a free and immediate use of the lancet.

From the consideration of those particulars, it is easy to regulate the practice of blood-letting in the treatment of the Asthma. Blood-letting is more urgently required in the first violent attacks of the disease, than in the succeeding ones; though in these also it may be highly requisite, especially in people who, passed the meridian of life, are full and corpulent, prone to indolence, fond of strong liquors and high living.

The utility of blood-letting in the Asthma, when plethora prevails, and the symptoms are sufficiently urgent to demand it, is great and obvious. It is, with respect to the first indication,

tion, highly antispasmodic, and contributes much towards the solution of the fit. With respect to the second indication, it acts powerfully as an expectorant, which might indeed have naturally been supposed from its antispasmodic effects; for whatever takes off the spasm from the air vessels of the lungs, must evidently promote a discharge of mucus from the mucous ducts. As to the third indication, it obviates most immediately and effectually every particular symptom arising from plethora; such as great tension of the vessels of the head, severe head-achs, peripneumonic affections, violent heat and other symptoms of an inflammatory fever, rupture of blood-vessels, hemorrhages from the nose, spittings of blood, &c.

But although bleeding, for the reasons above-mentioned, is, when plethora prevails, so very beneficial in the Asthma; yet in patients, whose constitutions are weak and relaxed, and in which there is no appearance of fulness and inflammation, any considerable evacuation of blood is very hurtful*, even though the difficulty of breathing and spasmodic affection of the

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lungs

* Vid. Observations on the Abuse of Medicine, in which the bad effects of the improper and unnecessary use of blood-letting on the constitution are fully shewn.

lungs take place in a violent degree. In all such cases blood-letting encreases the weakness of the constitution, and whatever encreases weakness gives irritability; which is well known to lay the foundation in relaxed habits, of the most severe and dangerous Asthmatic fits.—The general appearance of the constitution, the weakness of the pulse, the relaxation and want of tone in the muscular fibres, and the previous state of debility in the digestive organs, as denoted by want of appetite and the usual symptoms of indigestion, will sufficiently point out the impropriety and danger of blood-letting, and more especially when the fits have frequently recurred, and when the patient occasionally has had recourse to the lancet without relief.

Emetics are often very serviceable in the Asthma, but considerable caution is required in the management of them. When the stomach is loaded at the first approach of a fit, before any violent symptoms have made their appearance, a gentle vomit is of great use, as it clears away acid, putrid, or viscid matters, diminishes the oppression at the stomach, and renders the ensuing fit less violent and distressing. A load of undigested food, attended with

with flatulency, distends the stomach, and prevents the free descent of the midriff; and, if it pass from the stomach into the bowels, it still continues to distress the patient with fulness, pain, and uneasiness. In the history of the disease, we mentioned the symptoms which usually preceded the fit*; and when those occur, and a return of the Asthma is expected, a vomit of *Ipecacuan*, with a small proportion of *Tartar Emetic*, of *Antimonial Wine*, or *Vinegar of Squills*, is given with safety and advantage.

If an emetic has not been used at the approach of the fit, and the patient is laboring under a severe attack, with great anxiety and difficulty of breathing, a vomit is very dangerous. But when the disease has continued some time, and there is an evident abatement of the symptoms, a vomit, if the stomach be foul, may then be prescribed with the utmost propriety.

In like manner towards the conclusion of a fit, when the severity of the symptoms is removed, and the patient still complains of tightness and stuffing in his breast, it is extremely necessary to order a gentle vomit to promote a discharge of phlegm from the lungs. Emetics

at the same time tend to take off any feverish symptoms, to open the pores of the skin, remove spasm, and cause a gentle perspiration*. In cases too where we do not wish to produce full vomiting, antimonial medicines, particularly *Tartar Emetic* and *James's Powder*, are often given in small divided doses with much success, even in very obstinate fits of the Asthma†.

The next thing to be enquired into is the *state* of the body respecting *costiveness*, which is very pernicious to the asthmatic patient, and aggravates the symptoms of the fit. When the bowels are loaded, and particularly when the large ones are distended with flatulencies and hardened *feces*, the free descent of the midriff in

* Sometimes violent vomiting precedes or accompanies a fit of the Asthma, and Floyer has observed that *cold water* has afforded the most relief. I mention this fact, because I have in several cases of obstinate vomiting, from different causes and in different disorders, found cold water the most grateful and beneficial to the patient; and all warm liquors evidently detrimental by exciting pain and encreasing the sickness. But if the stomach is inflamed cold liquors are very hurtful.

† The Lady of an eminent Physician of my acquaintance labored under this Asthma, and during the fit he gave her tartar emetic, and gradually encreased the dose until she took four or five grains at once, which greatly relieved her asthmatical complaint, but produced no sensible evacuation.

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in inspiration is prevented, which, during the existence of the disease, is very prejudicial. For this reason *laxative* and *purgative remedies*, either taken by the mouth, or given in the form of glysters, with a view to empty the alimentary canal, have always been found useful in the Asthma.

With this intention the common laxative and purgative remedies are employed, viz, *rhubarb*, *aloes*, *jalap*, *sena*, *oleum ricini*, *manna*, *neutral salts*, *cream of tartar*, and various preparations formed from these and other laxatives, as *lenitive electuary* and the *laxative tinctures* *. The warm opening medicines, such as the *tincture of rhubarb*, *tinctura sacra*, *Rufus's Pill*, are frequently recommended in this disease, in cold constitutions, and where the stomach and bowels are weak, irritable, and subject to be inflated with wind. But in full and plethoric habits, the saline purgatives, the *bitter purging salt*, *Glauber's salt*, *soluble tartar*, *cream of tartar*,

* It is remarked by Floyer, that asthmatics are not very subject to costiveness, that at the beginning of the fit they have often a loose stool, and that they are easily purged. This remark is not without some foundation in truth, though there are many exceptions to it. The knowledge of it therefore may prevent some from giving strong purgatives in the fit, which are by no means adviseable, or even safe.

tar, and *others* of a *cooling* nature are the *safest* and *most* useful. In this case a *gentle* purgative is given in preference to a *laxative*, and it is more efficacious, as it produces a more copious evacuation, contributes somewhat towards diminishing the fulness of the vessels, and at the same time causes a revulsion of the fluids to the abdominal viscera.

But when the patient is weak, or advanced in years, and his stomach and bowels are in a relaxed and irritable state, neither laxatives nor purgatives can be given with propriety. In these cases the *laxative glisters*, made warm occasionally with aromatics, answer the purpose of emptying the bowels and bringing away hardened feces, without exhausting the patient's strength by causing too large an evacuation, which even a mild laxative would sometimes do. Glisters likewise are frequently useful in the fit to empty the bowels, even in more robust constitutions, when the stomach is so irritable as probably to reject medicines by the mouth, or when a medicine of a different nature is strongly indicated, which cannot be conveniently joined with a laxative.

As soon as the fulness of the vessels and the state of the stomach and bowels have been carefully attended to, *antispasmodics*, *tonics*, *pectorals* and *expectorants* come into use, with a view to take off the spasmodic constriction of the air-vessels, and to promote a discharge of mucus from the lungs. A great variety of these are recommended by different practitioners. The antispasmodics, which are principally employed during the fit, are *musk*, *camphor*, *castor*, *asafætida*, *opium*, *blisters*; the tonics are the *Peruvian bark*, *bitters*, and (we shall beg leave to add from a thorough conviction of their utility) the *Flowers* or *Calx* of *Zinc*; the pectorals and expectorants, are *oils*, *mucilages*, *squills*, *garlic*, *gum ammoniac*, and the *volatile alkali*. Of these we shall speak in order, and begin with the use of antispasmodic remedies.

Musk, *camphor**, *castor*, and *asafætida*, are often used with advantage as antispasmodics in the fits of the Asthma, when pure and not complicated with inflammation. They are pre-

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* Dr. Millar recommends much the *julepum e camphora* in the fit of the Asthma. His dose is one or two spoonfuls every three or four hours. He thinks solid camphor lies undissolved in the stomach. Before he gives the *julepum e camphora*, he usually prescribes a gentle emetic, and then a dose of the tincture of Rhubarb, or of the *tinctura sacra*.

scribed either in a solid or liquid form, as occasion may require. The reason why they do not relieve the patient, so much as one might expect, is because the dose of them is often too small. Ten, fifteen, or twenty grains of good musk or castor would act as an useful antispasmodic, when one or two grains have no sensible operation. In consequence of the antispasmodic power of those remedies, they evidently become expectorants, and promote the discharge of phlegm from the lungs. As *Musk* and *Castor* are expensive remedies, and often adulterated, their operation is less to be depended upon than that of *asafœtida* and *camphor*. *Asafœtida* * is frequently prescribed in large quantity in the fit. *Camphor* should not be given at first in a full dose †, lest its effects on the constitution should be too violent. ‡

But

* I must not omit to observe, that *asafœtida*, though it is an useful medicine in the Asthma, yet sometimes disagrees with the patient and increases his disorder. Its taste and smell are agreeable to some, but very offensive to others.

† Vide Dr. Alexander's *Experimental Essays*.

‡ Under the head of antispasmodics, I must not forget to mention, that the late Dr. Gregory, in his public lectures, recommended strongly the *bathing* of the feet in *warm water*, as an useful remedy in the pure convulsive Asthma, unconnected with plethora. Some too have spoken well of the effects of *ether*; it is, however, very uncertain in its operation, and often disagrees in the Asthma.

But *opium*, as an antispasmodic, is the most powerful, and one from the use of which we are able to procure the most immediate and evident relief, both in abating the fits and procuring rest. We give generally fifteen or twenty drops of the *tinctura thebaica*, or, if a milder opiate be required, one or two tea-spoonfuls of the *paregoric elixir*, in a draught, particularly at bed-time, and find that mode of using opium preferable to pills or boluses, for the operation of the remedy is more immediate and certain. Pills are often slow of solution in the stomach, and sometimes are never dissolved at all, but pass whole through the alimentary tube. For this reason, one seldom uses opium in pills, or in any other solid form, except where the patient cannot keep a liquid medicine on the stomach. When pills are indicated, we use *simple opium*, the *pilule saponaceæ*, or *pilule e styrace*; so that one dose may contain about a grain, or a grain and a half of opium. The *confectio Damocratis* and the *theriaca Andromaci* are used by some as opiates; but there is such a farago of ingredients in their composition, and some of them of so inflammatory a nature, that I seldom or never prescribe them. In small divided doses, opium sometimes answers very well; but, in general, it is found

more effectual when given in a full dose, and its operation is more certainly to be depended upon. When we give opium freely, we should be particularly attentive to the state of the lungs; for if the patient be very much stuffed in his breast, small doses only are admissible, as large ones might dangerously increase the accumulation of phlegm in the air-vessels*.—Opium cannot be used with safety in full habits, where there is any inflammatory tendency, till the patient has been bled. But after blood-letting, twenty drops of tinctura thebaica at bed-time is frequently given with great advantage†. When opium is used, the state of the bowels must be cautiously attended to, otherwise costiveness may be brought on, which is prejudicial in the Asthma. Opium may be successfully joined to castor, volatile alkali, and other antispasmodics,

Blisters are often serviceable in asthmatical complaints. They may be applied between the shoulders, upon the arms, sides, or fore-part

* Vid. Morgagni, de caus. & sed. Morb. tom. I. p. 130, lib. II, De Respiratione Læsa—a tenui plumarum pulvere—in which the pernicious effects of opium were manifest.

† Floyer is very fond of uniting opium with acids, and thinks such a preparation would be very beneficial in the Asthma.

part of the chest. In dangerous and obstinate fits of the Asthma they are found of singular benefit *. We endeavour to prevent strangury by the liberal use of *diluent mucilaginous* liquors, by camphor rubbed on the plaister †, or by the interposition of a little muslin between the plaister and the skin. The blister should be removed as soon as it has operated, which is generally within the space of ten, fifteen, or twenty hours, and the water being let out, the cuticle should not be taken off, but the dressings put over it, which will be much less painful. The chief use of blisters is not so much by their evacuating as by their antispasmodic power, which is now so current in medical language, and so universally agreed to by Physicians, that it is unnecessary here to enter into a discussion of the subject ‡. In full and plethoric habits, we generally bleed the patient before the application of the blister. Blistering is not only useful in the pure convulsive Asthma,

* If the Asthma occur in consequence of repelled gout, the late Dr. Gregory, in his public lectures, used to recommend blisters or sinapisms to the feet.

† Camphor, used in this manner, is but little to be depended upon. The free use of diluents is the best method of preventing strangury.

‡ Vid. Observations on the Abuse of Medicine.

ma, but particularly so when it is complicated with the humoral, the catarrh, the inflammation of the lungs, of the pleura or muscles of the chest.

The next set of remedies to be employed to take off the spasm of the lungs, are tonics of the vegetable and mineral kind. The vegetable tonics, here alluded to, are the *bark* and *bitters*, which have long been employed; and the mineral tonic is the *Flowers* or *Calx* of *Zinc*, which I have given in many cases with success, and, as they are not yet in common use in the Asthma, shall beg leave to take this opportunity of recommending them to a more general trial, as being the surest test of the real value of any remedy, which may be deemed to merit the attention of the public.

In the fits of the pure convulsive Asthma, when plethora is not present, the *bark* is sometimes given with great advantage. It acts as a strengthener, supports the tone of the system, diminishes irritability, and obviates the spasmodic constriction of the lungs. In many cases, instead of causing a greater tightness of the breast and difficulty of breathing, it tends
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to take off both those symptoms *. The bark is very useful in those species of the Asthma, which are periodical, returning nearly at stated intervals, and especially when they are ushered in with any evident signs of an intermitting fever. In these it often cures the disorder; but it must be remembered, that the quantity to be given is considerable, not less than six drams, or an ounce, when the intervals of the fits are short, and four or five ounces or more, when the intervals are sufficiently long. Here too I would recommend Dr. Cullen's method of using the bark in intermittents, which is to give the medicine the oftenest, and in the largest doses, just before the time when the return of the fit is expected †. In other cases, where the fits do not occur

* Floyer mentions a case of a Lady who, after many other medicines had failed, was greatly relieved in a long fit by the bark. Her own words are the following: "At last I took a dram of the Jesuit's powder in a cordial-water, and that first dose relieved me so sensibly, that it seemed to press down the stoppage of my breath, and by repeating that, morning and evening, I perfectly recovered."

† If the fit recur periodically every day, or every other day, six drams or an ounce of bark in the first case may be given in the interval, and twice that quantity in the last.—If the fit recur once in eight or ten days, the patient may take half an ounce or six drams of bark in the space of every twenty-four hours;

occur at any stated intervals, and the bark is judged a proper remedy, we may, when the stomach will not bear it in substance, or when large and strong doses are not necessary, give it either in decoction, infusion, or tincture. *Bitters* likewise are serviceable as well as the bark; they are given in similar cases, and their use is regulated on the same general principles. †

The other tonic or strengthening remedy that we have to mention is the *Flowers of Zinc*, which, when plethora or fulness of blood is not present, I have found to succeed where others have failed. The Flowers of Zinc I first gave

hours; and two or three doses extraordinary the day before that in which the attack of the fit is expected.—I am speaking now of cases where the stomach can bear the medicine, and where there is no extreme irritability in that organ, no fixed obstruction in the lungs, nor any other evident cause which forbids the use of the bark.

† In some asthmatic fits the stomach is so much out of order, that neither the bark nor bitters can be used during the presence of the fit, on account of the disagreeableness of their taste. Other patients can take them, not only with ease but pleasure. The same indeed may be said of almost all other remedies; for there are many asthmatics who cannot bear ether, volatile salts, acrid aromatic fetid plants, spirituous waters, (which endanger suffocation) gum ammoniac, castor, &c. and on account of shortness of breath and general irritability, some patients can bear no medicine in the solid form of either pills, boluses, nor electuaries.

gave in the year 1776; and I had not heard of any practitioner who had used them before that time.

It occurred to me that since the Flowers of Zinc had been given with success in other convulsive and spasmodic disorders, it was highly probable they would be found useful in the convulsive Asthma. I was certain at least that the trial was perfectly safe. Accordingly in the year 1776, I prescribed the Flowers of Zinc in several asthmatical cases in private practice; and in the beginning of the year 1777, I made use of the same remedy in the York County Hospital; and the utility of it exceeded my expectations. I found it to be a powerful antispasmodic, and at the same time beneficial in strengthening the constitution. This discovery I immediately suggested to a few friends, and particularly to my worthy and learned friends Mr. Cappe, a Dissenting Minister in this city, and Dr. Fowler, Physician at Stafford. The dose of the Flowers of Zinc, which I usually give, is from four grains to half a scruple, twice or thrice a day. Some stomachs can bear ten, or even fifteen grains with great ease, and others cannot bear above two or three grains without nausea. Since my

first trials of the use of Zinc in the convulsive Asthma, I found in the Medical Commentaries for the year 1778, that Dr. Percival of Manchester, in consequence of the recommendation of his friend Dr. Dobson of Liverpool, has given this remedy in a disease, similar in some respects to the one above-mentioned; and I read with singular pleasure (as I have done every thing which has come from so able a pen) two or three cases, setting forth the advantages of Zinc in obstinate coughs of the convulsive kind *. I was happy to observe that the practice

* " Mrs. P. aged 28, a Lady whose constitution had been much impaired by frequent child-bearing, was attacked with a severe Asthma of the nervous kind, in the winter of the year 1776. The Asthma was cured by the usual methods of treatment, but left behind it a deep convulsive cough, the successions of which were no less frequent than violent. Gum ammoniacum, paregoric elixir, sp. nitri dulcis, and other remedies, were successively tried. Little or no relief being obtained, I had recourse to the Flowers of Zinc, beginning with half a grain twice in the day, and gradually increasing the dose to a grain and a half. The beneficial effects of this antispasmodic were soon visible, and in eight or ten days the patient was freed from her cough. A relapse afterwards occurred from cold. The same medicine was repeated, and the cough again yielded to it as before.

" T. B. P. a youth about ten years of age, had a deep hoarse cough, without any expectoration. The sound of it was very unusual, and not to be described; and it was attended with a quick, feeble pulse, flushings in the face, and pain in the breast.

Every

practice of so accurate and learned a physician, coincided with my own.—I have subjoined *some cases* of the Asthma at the end of this Treatise, in which I have used the Flowers of Zinc with success.

The last remedies, which we have to mention in the practice during the fit, are *pectorals* and *expectorants*.

Oils, mucilages, and spermaceti, are mild and useful pectorals, and are prescribed with advantage in many cases of the Asthma. They are not of a heating inflammatory nature, and therefore are frequently given in this disorder in dry bilious constitutions, in plethoric habits,

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or

Every morning, about two o'clock, the cough recurred with great violence, and continued almost without intermission till four or five. There was reason to suspect worms, and I had been careful to cleanse the primæ viæ on the first attack of the disorder. A solution of sperma ceti and gum ammoniac, with a few drops of tinct. thebaic. having no effect, I had recourse to the flowers of zinc. Half a grain was given at noon, and the same dose repeated at bed-time. The night passed with only a slight return of the cough; and, by continuing the use of this remedy, the youth perfectly recovered in a few days."

In the first of these cases, related by Dr. Percival, the cough followed the asthma, and was cured by Zinc. After curing the asthma with Zinc, I have likewise often cured the cough with the same medicine.

or where there is some degree of local inflammation in the breast. For this purpose they are joined with saline medicines of the antispasmodic kind, such as nitre, sal ammoniac, the saline mixture, the spirit of Mindererus, and the diuretic salt, which determine to the surface and promote perspiration *. In some cases, however, when the patient is loaded with phlegm and troubled with symptoms of indigestion, oils and mucilages are found to clog and disorder the stomach.

Squills, garlic, gum ammoniac, and the volatile alkali are useful expectorants; but as they are of a more active, as well as heating nature, they cannot be given in the Asthma, when plethora and inflammatory symptoms prevail. But when those are removed by proper evacuations, and particularly towards the decline of a fit, when

* "As to sweat, in a severe fit it is very great sometimes, and in bed very hot, and without any benefit to the asthmatic. I have often taken spirit of hartshorn to produce sweat, and to put by the fit, but it had not that effect, but made the following fit more violent."—This opinion of Floyer seems well founded, and he has, therefore, done well to express it in direct terms. I have often seen profuse sweating very pernicious in the Asthma, but never beneficial. It renders the constitution tender, relaxed, irritable, and more subject to take cold.

when nature is endeavoring to relieve herself by an expectoration of phlegm, squills, garlic, gum ammoniac, and the volatile alkali are useful remedies. For when the discharge of mucus is in small quantity, they are thought to encrease it, and, when it is thick and viscid, to render it thinner and more easily to be expectorated. These medicines are likewise very beneficial in phlegmatic constitutions, and where the humoral Asthma is complicated with the convulsive. In these cases, it is highly requisite to promote expectoration, and the relief obtained by it is considerable. To those who cannot bear the taste of squills, gum ammoniac, &c. wafer paper is very convenient for concealing it, either in pills or boluses. The *acetum scilliticum*, the *oxymel scilliticum*, and the *lac ammoniacum*, are very useful preparations of those remedies, where the palate and stomach of the patient can bear them with ease*.

PART II.

We proceed now to the last part of this treatise, which considers the means of preventing

* Floyer is particularly fond of the vinegar and oxymel of squills, which he recommends as excellent remedies. He calls the vinegar of squills *Galen's bitter acid*, and says that "taken at bed-time, it often puts by the fit."

ing relapses in asthmatical complaints, and a most essential part it is. Many of the rules and observations, which tend to prevent the returns of the disease, will tend also to prevent the first attacks of it. The practice in the intervals of the asthmatic fits comprehends regimen as well as remedies, both are very important, and neither of them alone sufficiently to be depended upon. We shall begin with pointing out a proper *regimen*.

The first thing to be mentioned is the state of the atmospherical air, serving the purposes of respiration, with regard both to *purity* and *temperature*.

Pure air is highly requisite to the health of the human constitution; but it is particularly grateful and refreshing to the asthmatic patient. His lungs are often obstructed, there is not a free passage for the air, a less quantity of it is inspired, and consequently that quantity ought to be as pure as possible, that it may support properly the functions of life. Hence the *country* is found far preferable to *large towns*, in which the smoke, dust, putrid exhalations, and other impurities of the air are very offensive to the

the asthmatical. For though the air of towns, from some peculiarities of constitution, may agree better with a few, than country air, yet this is no argument against the general fact. The inhabitants of towns, as we before observed, are less exposed to changes of weather, than those who live in the country, and this may be one principal reason why the country is sometimes said to disagree. A dry state of the air, which by its heavy pressure makes the Barometer rise, is observed to be the most favorable to those who are afflicted with this disease. Hence the intervals are longest in a dry season, and particularly in calm frosty weather, when the mercury stands high. The West and North winds are in this country found the least prejudicial*.

To preserve the purity of the air, we ought frequently to have recourse to ventilation. If we neglect this most necessary practice of ventilating houses, the air within doors will certainly be impregnated with noxious vapors, exhaling partly from our own bodies, and partly from those around us. In vain any one will hope to enjoy the benefit of the country.

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*Floyer.

if he constantly lives in a small close room, from which he excludes, with all possible caution, the admission of fresh air. Doors and windows ought frequently to be opened, that the air in all the different apartments of the house may be changed. This is not mentioned as matter of indifference, but of absolute necessity. For this reason too, a constant ventilator in small rooms is very salutary. Asthmatics are strangely deceived if they imagine that pure fresh air is injurious to them. Are they not often obliged to fly to it for the support of life? When the fit attacks them, do they not often rush out of bed into the cool air? Is that likely to be pernicious at the commencement of the Asthma, which is absolutely necessary for the existence of the patient, when the disorder has gained strength and is become worse by duration?—It is an excellent practice for a person generally to leave the door or window of his room open when he goes out of it, that he may find a pure fresh air within when he returns. If this practice is constantly attended to, the patient will find great benefit from it; and the neglect of it, as daily observation proves, is very detrimental to health.

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With regard to the *temperature* of the air, I have already observed that *external heat* is a powerful cause of the Asthma; that it produces weakness and irritability of the lungs, predisposes them to convulsive affections, makes the constitution tender, and very liable to be injured by cold, and sudden changes of weather; in consequence of which the patient is subject to catarrhs, winter coughs, peripneumonies, tubercles, and obstructions; which also weaken the lungs, encrease their irritability, and lay the foundation for asthmatical complaints.

Nothing can, in my opinion, be more contrary to the true plan of preserving health, than that which is followed by the bulk of mankind. In the first instance, thoughtlessness, ignorance, or an absurd compliance with custom, leads many to sit in *close rooms*, near *large fires*, and to lie *hot* in the *night*. If they perspire very much in bed, they do not give themselves the trouble to reflect upon the cause, but continue on in the same way, although, in consequence of too much covering, they are so hot, that they cannot sleep with any degree of comfort. By this method of proceeding, their constitutions become tender, and they take cold from change of weather, or some

other slight cause, which terminates in a cough or catarrh. To remove this indisposition, (which a little common prudence would do much more effectually and in a shorter time than great care) the patients confine themselves to their room, are kept still warmer in the day, and by lying with more covering in the night, and drinking plentifully of warm diluting things, endeavor to sweat profusely, under an idea of obtaining relief. After much relaxation of the constitution, with increased irritability of the lungs, they find themselves, perhaps, in four or five weeks, free from their disease, and again venture abroad. In this situation it frequently happens, that they get another cold, blame some trifling circumstance, are vexed at themselves, resolve to be more cautious for the future, and again enter upon their former plan of cure. This state of the constitution and mode of treatment, is particularly unfavorable in the autumnal season, when winter, and perhaps a cold changeable spring, present before their eyes a dreary melancholy prospect. Thus one cold succeeds another,—the cough, with expectoration at times, continues all winter, goes off in the summer, returns again in the autumn, changes into what is termed a winter cough or the humoral

humoral Asthma,—stuffing and shortness of breath supervene, with sudden tightness over the breast, and difficulty of breathing. In this way the convulsive Asthma in irritable habits is added to the humoral—both diseases encrease together—obstructions in the lungs form, and the malady is frequently rendered incurable. An unnatural degree of heat is often the principal cause of the complaint, though, unhappily for the distressed patients, it is, perhaps, considered by them as essentially requisite to the cure.

Now to prevent those evils is matter of the utmost importance. The ease, the comfort, and welfare of thousands depend greatly upon it. This disorder robs us daily of many useful and valuable members of society.

The method of prevention, which, I believe, would commonly be successful, is comprehended in few words; and it will not only answer that important end, but also contribute much to preserve the whole constitution from nervous irritability, general weakness, and many other complaints. It requires that we cast off the effeminacy of the present times, abandon the destructive luxury of heat, and compelled
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by unanswerable reasons and long experience, return to follow that line of conduct, which Providence originally intended for us, and which alone is suited to the nature and structure of our constitutions.

One of the most useful maxims which can be advanced on this subject, is *To avoid much artificial external warmth, and to breathe always a cold or temperate air, but never a heated one*; a maxim, which if universally known and adopted, would contribute greatly both to restore and to preserve the health of the human species.

We are not here recommending cold in the extreme; for a practice, founded on such a principle, ought certainly to be deemed rash and absurd. The medium is safe, but all extremes are dangerous. If the room be small, let the fire be small; if the room be large, let the fire be large in proportion; but in neither case should the patient be so near it, as to breathe a heated air. In very small close rooms, whether used as parlours or bed-chambers, the air should be frequently changed by ventilation,

ventilation, with a view to moderate its temperature.*

At nights the curtains should always be undrawn at the feet of the bed; and partly at the sides, both in winter and in summer. To have the curtains drawn close is very unwholesome. The covering of the body should be such as will maintain a moderate, but a sufficient degree of warmth, without inducing a copious perspiration, or a burning heat. It should be greater upon the feet, than upon the breast; for if any part of the body be cold, it is generally the lower extremities, which are most distant from the heart, and in which the circulation of the blood is the most languid. Part of the covering of the bed may consist of loose things, as a coat, furtout, &c. The blankets and counterpane should come single up to the chin, and not, as is commonly the case, lie double over the breast, for if they do, they often load the patient, impede respiration, and towards morning heat the body to an unnatural

* We just before observed, when speaking of the purity of the air, that a ventilator in small-rooms was very useful, and that a door or window should at proper times be frequently set open. The same practice is highly requisite to render the air cool and temperate, and to prevent the bad effects of the excess of heat.

unnatural and unwholesome degree. The loose part of the covering at nights should be more or less, not only according to the season of the year, but also according to the present state of the weather at that time. Nothing can be more unnatural, than to have the same quantity of bed-cloaths in winter and in summer, or in the depth of winter and in the middle of spring, or even in soft mild winter weather, and an intense frost*. Such conduct, though too common, cannot be defended on the principles of the preservation of health. The brute creation, in this instance, set us a better example; they seek shelter, more or less perfect, according to the severity or mildness of the weather, and thus follow that course through instinct alone, which both reason and instinct recommend to us. One advantage of having some loose cloaths upon the bed, is the ease with which they may be cast off in the morning, when we feel ourselves growing too warm and disposed to sweat; for morning sweats are very hurtful, and sometimes even dangerous
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* In mild winter weather the Thermometer will frequently be at 50, and in an intense frost it will be at 15. The difference is 35 degrees. Summer heat is 75, which is only 25 degrees above 50; so that the difference of heat between mild winter weather and an intense frost is greater, than that between mild winter weather and summer heat.

in this disorder. The feather-beds, on which we lie, should be sufficiently hard, or covered with a mattress to make them so. A soft bed is very heating and unwholesome.

With regard to the dress of the patient through the day, it should be various according to his age and constitution, to the duration and violence of the disease, and to the season of the year. A young man of an active turn of mind, in whom the disease is just commencing, ought not to clothe himself like an old inactive man, borne down with the infirmities of age and long illnesses. A strong constitution requires less covering than a weak one. But in cold weather, it is very proper in general for all asthmatic patients to be well clothed, that perspiration may not be suddenly checked. Yet a load of superfluous clothing is extremely hurtful, in consequence of its power of relaxing and weakening the constitution, and of inducing a disposition to profuse sweats, by destroying the tone of the exhalant vessels, which open upon the surface of the skin. It is, however, far better to have the body kept warm by *proper clothing*, than by sitting in warm rooms near large fires, and breathing a hot air, for the pernicious in-

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fluence of the last is more immediately felt upon the lungs. A *flannel waistcoat*, *warm stockings*, and a pair of *warm strong shoes* with *cork soles*, cannot be improper for one of advanced years, laboring under this disease, whose exercises are always moderate and regular. But with regard to the young and strong, who delight in more active exercises, it is not so clear whether a flannel waistcoat be advisable or no. If they be fond of shooting, hunting, and such like diversions, a flannel waistcoat will often be found very heating. To patients of this turn one would rather advise the ordinary dress of the country, and instead of a flannel waistcoat, recommend the occasional use of a furtout in very cold weather, when their exercise is moderate. But if a flannel waistcoat be worn, it should be above the shirt and frequently changed *. The difficulty lies in casting any additional clothing, as the warm weather comes on, and particularly to the thoughtless and inexperienced. But when

* If the patient be extremely tender, or so weak as to be subject to sweat profusely, it may not be improper in this case to wear the flannel waistcoat next to the skin — In some cases too, under similar circumstances, a calico waistcoat is worn with advantage, when a flannel waistcoat is too warm. The calico waistcoat should be next to the skin, and frequently changed.

a young man, reduced by the disease, is unable to engage in any active exercises, and is become as regular in his motions and conduct, as those of a more advanced age,—to such a one a flannel waistcoat in the cold months of the year, is often comfortable and salutary.

The asthmatic patient should avoid large parties in *small* rooms, and all *crowded public places*, in which the air is hot and impure. A few hours spent at a place of that kind, especially on a crowded night, may destroy all the good effects of twelve months prudent conduct.

Now if it should be asked whether or no the asthmatic patient, who has always run into the extreme of heat, as well by sitting in very close rooms, as by lying very hot in the night, and loading his body with superfluous flannels in the day, should endeavor to alter that manner of living, to which he has been so long accustomed,—the answer is given in the affirmative. But the change here recommended, is not to originate from a sudden hasty thought to be executed in a moment; it is a *cautious gradual change*, from a pernicious unnatural mode of living, to one which is agreeable to the laws of nature, consistent with the frame of the

human constitution, and, I will be bold to add, founded on just principles and successful experience. I say a cautious and gradual change, for any other change would be dangerous in the highest degree. Fortunate are we, if we have never acquired those pernicious habits; but when they are once acquired time and care alone can extricate us from them. First one little error should be corrected, and then a second. The season of the year, and the state of the weather should be taken into consideration. Spring and summer is a more favorable time, than autumn and winter. But proper changes may be ventured upon at any season of the year, for it is absurd to continue on in that plan, which is fixing the disorder and ruining the constitution. To make the change which is here proposed, will require often a considerable length of time, not less than years, if the habits are bad, and have been long established. The smallest alterations are to be made at once; and when made, they ought to be steadily continued. If during the change, which is begun deliberately, and fixt upon with judgment, a relapse of a fit should take place, the patient should not return to his former habits, but he should consider how many severe relapses he has already had,

had—console himself with the idea of more mild and less frequent returns of the fits,—and adhere with firmness to what experience has proved to be right. Relapses are to be expected, and the more tender we are, the greater probability there is, that relapses should occur. But these are to be borne with patience, under the pleasing prospect of better times, for they would have occurred had no changes at all been made. I am speaking now to those patients in whom there is a chance of recovery. But with regard to those who are old, decrepit, and past all hopes of a cure, or where the vital powers are dangerously exhausted at an early period; to them the present advice, in its full extent, is not directed. A plan of treatment that would be proper for a person of thirty or forty, of a sound habit of body, would ill agree with one of seventy or eighty. Ease in the last case is all that can be expected, but a cure, in my opinion, ought to be attempted in the first. We know the task is arduous, but the blessing of health will amply repay the trouble, even tho' it should require several years to establish the cure.

With regard to *diet*, as the stomach is often weak and relaxed, much care and attention is necessary.

necessary. Symptoms of wind, indigestion, colic pains, heart-burn, costiveness, want of appetite, and many others, which are attendant on chronic or general weakness, occur frequently in asthmatical cases. This subject has been very fully and carefully considered in a pamphlet, which I lately published on Chronic Weakness, and therefore it would be improper here to enter again into a full discussion of it*. The causes and nature of chronic or general weakness of the whole constitution, ought to be minutely investigated and well understood by every one, who wishes to practice with success in the healing art.

The diet of asthmatical patients should be mild, easy of digestion, and without any high seasoning. *Plain meats*, without fat or greasy sauces, are the most proper, along with a moderate quantity of *vegetables*, when the stomach can digest them. The stomach should never be over-loaded at any one meal, for that prevents the free action of the midriff, creates a great impediment to respiration, and gives much

* As Chronic Weakness comprehends a weak stomach and a bad digestion, as well as general weakness and relaxation of the nerves and whole constitution, it was necessary for me, in the above-mentioned pamphlet, to be very full on the article of diet; to which therefore I must beg leave to refer my reader.

much uneasiness in the Asthma. We know that asthmatics are often fond of high-seasoned dishes, and eat them with pleasure; but moderate seasoning, which may be allowed, is certainly less heating and much safer. Any kind of *fish* which is not too rich and glutinous, is by no means improper in this disorder, when eaten with relish, and digested with ease; but affords, on the contrary, a mild wholesome nourishment to the constitution*.

Whatever creates wind, flatulencies, and acidities, ought to be carefully avoided by those whose stomachs are weak and delicate. Vegetables, in some cases, disagree, particularly cabbages, cucumbers, cold fallads, and such like. Every one, in these instances, must judge for himself, and his own experience must direct him†. Vegetables, where they agree

* Some are of opinion that all fish is unwholesome in the Asthma, and assert that it creates much phlegm; but this opinion is not well founded.

† Floyer (as well as many other Asthmatics) found the following things to disagree with him, viz. pyes, cakes, heavy pudding, flour meats unfermented, jellies, crude slimy flatulent meats, as herbs, fallads, mushrooms, peas and beans; but good bread, well fermented, well baked, with the bran not too much dressed out, is very wholesome food in the Asthma, along with plain meats.

agree with the stomach, are very wholesome in themselves, and it rarely, if ever happens, that all vegetables disagree. *Bread, rice, potatoes, asparagus, artichokes*, or some *others* of the *lightest* kind, will be found of easy digestion.—*Fruits* should never be eaten on a full stomach, for which reason, *deserts* after dinner are very improper for the Asthmatical. *Ripe fruits*, either fresh or dried, taken on an empty stomach, are not to be forbidden, when they do not disturb digestion; for they are cooling, highly antiscorbutic, somewhat opening, and therefore very useful in inflammatory constitutions. If the stomach be so weak, that fruits create wind, acidities, or pain, they should be avoided, and the diet should consist of mild meats, and be of a more solid restorative kind,

Cows' milk, asses' milk, and goats' whey are wholesome food, and are often very proper in asthmatical cases; but the stomach should never be loaded with too large a quantity at once*. Some people, nevertheless, cannot

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* Dr. Millar is a strong advocate for milk.—Goats' whey is drunk to great advantage in the Highlands of Scotland; and as a long journey is often very serviceable to the asthmatical, an excursion

use milk in any form, not even in a diluted state; they find that it clogs and oppresses the stomach, or induces costiveness.

Malt liquors, if the digestive organs be sufficiently strong to bear them with ease, are not improper, when moderately used; and many asthmatics esteem them highly. Small beer of a proper age, well fermented, and drunk out of the cask, may generally be allowed. Good sound ale too, of the same qualities, is sometimes very proper. But when the stomach is weak, all malt liquors are apt to create wind and acidities; in which case they are pernicious. *Toast and water* by itself, or with a *little wine* of a good body, is to be advised. If wine turn sour on the stomach, water alone is very proper, and it may occasionally be mixt with a *small proportion of rum or brandy*. The moderate use of fermented liquors is necessary in asthmatical disorders, when there is any gout in the constitution,

excursion of that kind in the spring or summer months, is sometimes attended with the happiest effects, especially if it suit the patient's taste, and be conducted with proper care and judgment. Consumptive cases, likewise, have often been greatly benefited by such a journey, where change of air and exercise are united, along with a mild cooling diet, consisting chiefly of goats' whey, milk, and vegetables.

constitution, or in people reduced by the disease, or far advanced in years. In the young and plethoric, a *spare diet*, consisting chiefly of *milk* and *vegetables*, without any *strong liquors**, is found, by experience, to be the *safest* and *best*. But these things must be determined by the attending practitioner, from a careful investigation, and an accurate knowledge of the patient's constitution.—*Tea* and *coffee*, as they not only relax the nerves, but encrease irritability, and disorder the stomach, are for the most part improper.—*Acids*, particularly the juice of *lemons* and *oranges*, are serviceable in scorbutic, inflammatory constitutions; and when moderately used, agree often with the asthmatic patient. They may be mixed with water alone, or sometimes with a little wine and water as occasion may require. But in cases of weak stomachs, they often create acidities, and disorder the patient to a great degree †.

Exercise

* Floyer advises a pint of water to be drunk in a morning, and a gill at noon and at night; and asserts that if *fermented liquors* were not used, the asthmatic fits would be *rare*. Water with a toast in it, agreed best with him, and frequently put off his fits.

† Floyer recommends the use of acids and acescents very strongly in the Asthma, and affirms that no Asthma can either be cured or prevented without them. They are particularly proper

Exercise in the interval of the asthmatic fit is *extremely* beneficial. The good effects of it on the constitution, as well in diminishing plethora, as in removing irritability, and strengthening the whole frame, we have had occasion to shew in former publications. It is hardly necessary to add, that too much can never be said in praise of it, when proportioned

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proper in summer, at which time too he thinks the more cooling remedies are to be advised, such as vitriolated salts, sal ammoniac, sal prunel, sal succini. The acids and acescents which he recommends are, the tartarous acid,—verjuice,—vinegar,—mineral acids,—acid vegetables and fruits, as sorrel, barberries, grapes, lemonade, lemon-poffet-drink, butter-milk, decoctions of pippins, conserve of sorrel and hys, rob of barberries. Floyer further advises the patient to acidulate his meats and drinks.—But all these things should be used with proper restrictions, as sometimes they ferment, disorder the stomach, and occasion griping pains and acidities, particularly in hypochondriac people. Floyer thinks acids are the best correctors of opium, bitters, gum ammoniac, &c. and greatly improve those remedies in asthmatical cases; for he properly considers all very hot medicines as hurtful. He used very much what he styles his *bitter Acid*, of which the following is the recipe. R. Rad. zedoariæ ʒ i. coq. in Aq. Font. ℥ ij. ad ℥ iss. Colaturæ adde aceti ʒ iv. in quibus dissolvatur ammoniaci ʒ i. Colaturæ adde mellis ʒ iv. Coq. & despumatur & coletur. When he found his Asthma coming on he took three spoonfuls of that bitter acid, and drank after it toast and water, which, he says, allayed the inflations of his stomach, and put off the fit. He continued this remedy sometimes for fourteen nights together; and sometimes he used to take the same dose morning and evening for several months.

to the strength of the constitution, and to the degree of the complaint. Young people, in whom the disorder is commencing, may, if they have no natural deformity of body which renders it unadvisable, use exercise freely, on foot or horseback *, especially if they are fond of rural diversions, such as farming, botanizing, shooting, hunting, &c. Those who are in years, of a gross corpulent habit, or of an emaciated constitution and deformed person, who have been long and heavily afflicted with the disease in its complicated state, cannot bear strong exercises. To such, gentle motion in a carriage, on horseback, or by sailing, is preferable to bodily exercise or labor, which, by quickening the circulation too suddenly, is found to oppress the lungs, to disturb the freedom of respiration, to fatigue and exhaust the patient. When joined with moderate exercise, the advantages likewise of cool fresh air in asthmatical cases, are rendered still greater. I would not wish to be understood to condemn walking, as improper, where it can be borne with tolerable ease; since it is the only exercise that many patients are able to make use of, and I have
seen

* After a fit, riding is observed to promote expectoration, and is therefore very serviceable.

seen it prove remarkably serviceable. Floyer very justly observes, "That they who use no exercise in the intervals of the fits, soon fall into cachexies, lethargies, dropfies through too much serum, loss of appetite and consumption, for want of perspiration and expectoration."

The *occasional causes*, which bring on the fits, ought to be closely attended to by the patient himself, as well as the practitioner. In this respect, the convulsive Asthma resembles the epilepsy, hysterics, intermittents, and other nervous disorders, which return by fits. The avoiding of occasional causes is of the utmost consequence in the Asthma; for the more frequent the returns of the disorder are, the disposition to them in the constitution becomes stronger and the cure more difficult. If unaccustomed cold, moisture, or sudden changes of weather, bring on the fits, the patient should endeavor prudently to guard against the effects of those; but should not, at the same time, run into the opposite extreme. Dust, metallic fumes, smokes, and all particular smells, ought to be carefully avoided. I mentioned the case of a gentleman, in which the smell of new feather-beds bring on his fits. Nothing, surely,

surely, would be more absurd, than for him to continue to sleep in such a bed, which in time would so disorder the lungs, as to render them liable to convulsive affections from other slight causes. Any trade or business, if it disagree with a patient, should, if possible, be changed, otherwise it will be extremely difficult, if not totally out of the reach of art, to cure the disease. For if dust, smoke, metallic fumes, &c. first induced the Asthma, they will, if applied to the lungs, continue to encrease it. All great evacuations by sweating, bleeding, or purging, as well as excessive fatigue, and violent motion, should be avoided; because they weaken and exhaust the constitution, and bring on the fits. Shouting, public speaking, singing, and all other strong exertions of the voice are very pernicious, especially if the lungs be weak, and the patient be of a scrofulous habit. All asthmatics should endeavor so to govern their tempers, that small causes of offence may not excite the passion of anger, and, along with it, a fit of the Asthma. Excessive study and very close application of mind is hurtful, as well as all surfeits, debauches, excesses in venery. The depressing passions, such as grief, sadness, &c. are to be moderated as much as possible;

ON THE ASTHMA. 111

fible; for they disorder the nervous system, impede the circulation of the blood, check perspiration, and often induce a fit.

Having said thus much concerning regimen, we proceed to consider the *remedies* which are to be employed in the *intervals* of the Asthma.

With a view to practice successfully during the intervals of the disease, it is necessary to attend carefully to the patient's constitution, and to the accustomed frequency of relapses. If the fits be short and frequent, recurring (for example) once or twice in twenty-four hours, and lasting only about half an hour or an hour, the remedies, whether of the strengthening or antispasmodic kind, are generally given in the intervals of the disorder. If, on the contrary, the fits be long, with great intervals, the remedies, which have been already mentioned, are, during the time of the fits, to be employed; and we must now proceed to point out, what particular practice is found to be the most successful in the intervals, for preventing relapses.

In all cases of the Asthma we ought to consider whether the patient be of a *full and plethoric*;
or

or of a *weak and relaxed constitution*;—whether the lungs be *sound*, or *obstructed with tubercles*;—whether the Asthma be *purely convulsive*, or, what is much more frequent, *complicated with a winter cough*. From the consideration of those particulars, joined to others, which will naturally arise in the discussion of the subject, we shall endeavor to draw the necessary distinctions, and to lay down the useful rules of practice, without entering into theoretical disquisitions, unsupported by facts.

1. If the patient, who is subject to the Asthma, be of a *full and corpulent habit*, we ought, in this case, to regulate our practice, under the general principle of *diminishing corpulency and fulness* of the vessels. For this purpose, besides a *low diet** and *regular exercise*, or rather *gentle labor*, (which are of the *utmost importance*) it may not be improper, occasionally to advise *blood-letting*, when previous habits, with a sense of fulness and pain in the breast and head, seem

* “The less Asthmatics are nourished, the longer are the intervals of the fit, and the clearer is the breath; for if we eat moderately we subtract the quantity of our chyle, and we better digest what we take, but any excess raises a tumultuous fermentation in the stomach and blood, which produces a rarefaction in the spirits. So true is Hippocrates’s observation, *If a man eats and drinks little he shall have no disease.*” Floyer.

seem to indicate it. But the unnecessary use of the lancet ought cautiously to be avoided, for it would encrease the disposition to plethora in the constitution, and so tend to quicken the return, and aggravate the symptoms of the disease. When laxatives and purgatives are indicated by costiveness and plethora, there are, besides those kept in the shops which we have already mentioned*, *sea water*, *Harrowgate water*, and the *water at Thorpe-Arch*, which are found in some cases to answer well. The virtues of the last, as a laxative, are of a much weaker and milder nature than those of the two first. *Saline and nitrous mixtures*, the *mineral acids*, such as the *marine* and *vitriolic*, *decoctions* of *china*, of *sarsaparilla*, &c. may be employed with safety and advantage. Antispasmodics, *camphor*, *asafoetida*, *musk*, *castor*, *valerian*, may be occasionally used. *Issues* and *setons*, in this case, are often very serviceable. When, likewise, by time and proper means the fulness of the vessels is removed, and a general irritability remains, *bark*, *bitters*, *chalybeates*†, *Bath*
P *water*,

* Vide p. 71.

† Chalybeates, such as *rubigo & limaturæ ferri*, *sal martis*, and *chalybeate-waters*, can only be used, when chronic weakness is combined with the Asthma; for in other cases, particularly

*water**, *sea bathing* and the *cold bath*†, may often be advantageously prescribed; and if the disease be sufficiently urgent to require them, I must recommend strongly large doses of the *flowers of zinc*, from the cautious use of which, in the intervals of the Asthma,

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larly when plethora prevails, they are very hurtful. Neither will they, in all cases of weakness, agree with the constitution. They did not agree with Floyer. But a few exceptions are not a sufficient objection against their use in the interval of the fits. Floyer himself has prescribed them to others with advantage; he mentions patients who were relieved at the German Spa; and Dr. Millar, in his *Observations on the Asthma*, recommends them. Dr. Fowler, Physician at Litchfield, thinks the salt of steel more strengthening, in bodily weakness, than the bark; a fact ascertained by his own experience and repeated observations, which therefore may be relied upon with the greatest confidence. The dose of the *sal martis* (he properly observes) must be adapted with exactness to the stomach of the patient.

* Floyer drank the bath waters and recommends them, particularly in cold, corpulent, sluggish constitutions; but he speaks against bathing in them, as it opens the pores and subjects the patient to take cold. Yet he candidly mentions (p. 180) some cases communicated to him by Dr. Tyson, in which bathing in the bath waters was used with great advantage. Dr. Falconer, in his *Treatise on Bath-Waters*, p. 385, observes, that they “are often of great use in the intervals of “the paroxysms, in preventing their returns.”

† Dr. Millar is of opinion that the cold bath in the intervals is extremely useful, and preferable to all other tonics. He mentions several cases of its safety and success in preventing relapses.

I have seen the happiest effects in preventing relapses. Thus, by the judicious employment of tonics, the fixt local weakness and irritability of the lungs is most successfully obviated. All hot stimulating medicines in this, as well as in all other disorders accompanied with plethora, are highly dangerous and improper.

2. But if, instead of being full and plethoric, the patient be of a *weak, relaxed, and irritable* constitution, subject to the common symptoms of indigestion, then he must be considered as laboring under chronic or general weakness, and the practice, in the intervals of the Asthma, must be regulated on the same general principles, as the practice in that disease*. *Pure cool air, regular gentle exercise, a spare, but restorative diet*, joined to the proper use of *emetic, laxative, strengthening, and antispasmodic* remedies, are to be advised, as promising the fairest to be successful. The moderate use too of cordials is by no means to be prohibited. The antispasmodics and tonics, which may be employed, we have just mentioned†. The *cold bath* and *sea bathing*, at a proper time of the year, are particularly serviceable in this

P 2

case,

* Vid. Treatise on Chronic Weakness. † Vide p. 113.

case, when the patient is not too weak, when the lungs are free from obstructions, and there is no obstinate complication of the humoral Asthma. This practice will strengthen the whole constitution, diminish irritability, and obviate the unnatural delicacy and tenderness, which is acquired by imprudent exposure to heat. But if the constitution be so weak, as not to be able to bear cold-bathing, *temperate bathing* will be requisite, and, for this purpose, the patient may resort to *Buxton** or *Matlock Wells*,

3. If *scrofulous obstructions* or *tubercles* of the lungs occur along with the convulsive Asthma, they will require great attention in the intervals, lest, by neglect, the patient should fall into a deep consumption. Knots or tubercles in the lymphatic glands of the lungs, are a very common disease; but the distinguishing or diagnostic marks are of an ambiguous nature. This affection is often confounded with
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* Dr. Hunter, who is ever attentive to the public good, has not only been one of the first and principal promoters of a most excellent institution for the reception of Lunatics near the city of York, but has, at a great expence, provided *Medicated Baths*, one of which he has proved, by many well-grounded facts, to possess every quality of the Buxton Wells. Those in this neighbourhood, therefore, to whom it is not convenient to visit Buxton, may have the benefit of this Medicated Bath.

the catarrh. Hence practitioners have frequently considered a case as a common cold; when, in a few months, the patient has died of a pulmonary consumption. The reverse likewise is true; for many, laboring under a simple catarrh, have been thought deeply consumptive, who, nevertheless, were perfectly cured in a few weeks, by the very same person who had pronounced their disorder fatal.

A cough may be suspected to arise from tubercles, when it does not occur from evident cold; when it does not begin with stuffing in the head, hoarseness, or any discharge of mucus from the nose and throat; when it not only occurs in the spring, autumn, or winter, but also in the summer; when it is attended with shortness of breath, particularly on motion; when it is not full and violent, but often trifling, so as even to be denied by the patient; and when it does not go off in a few weeks, but continues many months. Our suspicions are rendered much stronger, if the lungs have been severely injured by the measles, local inflammations, or other complaints; and they are altogether confirmed, if, with the above circumstances, the patient be of a thin scrofulous habit, of a fine delicate complexion, with
swelled

swelled lips, glandular swellings in the neck, and a hectic fever. We may add too symptoms of a scrofulous affection in the mesentery, such as a tumid body, frequent diarrheas, griping pains, emaciation, &c. which will still render our suspicion of tubercles in the lungs stronger, and more indisputable*.

The case above stated is one of great nicety and difficulty as well as importance. But when an Asthma has continued long, recurring frequently with great violence, and is complicated also with the humoral, tubercles are always to be suspected, from the great injuries the lungs have sustained by the disease, independent of any constitutional scrofulous taint. No part of the body can be long and violently affected with a disorder, without being very sensibly injured; and dissections, in the cases of old asthmatics, have generally proved the existence of tubercles. The writings of Bonetus and Morgagni afford us numerous examples of what is here asserted; as well as the daily observations of several modern practitioners,

* Dr. Cullen, in a clinical lecture on a case of tubercles in the lungs, was very learned and accurate in the distinction and treatment of that disease.

tioners, who contribute much to the improvement of their art by an accurate relation of the morbid appearances observed on dissection. The tubercles, therefore, of elderly people, being the effect merely of the disease, will require, for the removal of them, the necessary treatment of the Asthma, both in the fit and during the interval; for unless the cause be taken away, the effect must continue*.

But the tubercles, before-mentioned, are chiefly of the scrofulous kind, depending on the constitution, accompanied with symptoms of an inflammatory nature, and often occur prior to the Asthma, or immediately appear to exist along with it. They are particularly dangerous to the young, whose chests are narrow, and where there is a consumptive tendency in the family. In this case, there is often great danger of a consumption, and therefore an early and cautious treatment in the intervals of the Asthma is highly requisite, to avert the impending evil. As this subject is too extensive

* I must here observe that *mercury*, given in small doses as an alterative, has been frequently prescribed by physicians of eminence, for the removal of tubercles of this nature; and not without success in several instances, when the patient was not too weak to bear it. Floyer recommends it, and the late Dr. Gregory was an advocate for it.

five to admit here of a full discussion, we must content ourselves with the mention only of the most important parts of the cure.

The first and principal requisites in the treatment, are to obviate and remove the inflammatory state of the constitution, lest the tubercles should inflame, and end in small ulcers of the lungs, which would soon degenerate into a deep pulmonary consumption. A diet, consisting chiefly of *milk and vegetables*, is of the utmost consequence, and should be steadily persevered in. *High living, much animal food, all seasoned meats, and strong liquors,* are very pernicious, as they encrease the natural tendency to inflammation, by inducing plethora, and stimulating the action of the heart and arteries. *Regular, gentle exercise* is of the greatest importance, and affords most evident relief, such as *riding, walking, &c.* The easy motion too of sailing or travelling in a carriage is very serviceable. *Country air* is strongly to be recommended, both in winter and in summer, and along with it, the utmost caution in avoiding *excess of artificial external heat*. If the constitution be full of blood, and there be a strong hard pulse, with pains in the breast, *repeated bleedings*, according to the patient's strength

strength and the urgency of the symptoms, are requisite and highly beneficial. *Mild cooling laxatives*, such as the *neutral salts*, *cream of tartar*, *rhubarb*, *lenitive electuary*, *castor oil*, *tamarinds*, &c. are advisable, to obviate costiveness and keep the body open. *Gentle emetics* are safe and useful; and likewise *antimonial medicines*, such as *tartar emetic* and *James's powder*, may be very advantageously prescribed in small doses as alteratives. *Oily and mucilaginous medicines* are given, along with nitre, the diuretic salt, and the saline mixture. *Acids*, both *vegetable* and *mineral*, are cooling and useful, but particularly the first. *Blisters* and *Issues* have often been found productive of good effects in these cases. When the cough is troublesome in the night, and prevents the patient from resting, a gentle *opiate* is very serviceable; and if there be any feverishness, a small dose of *tartar emetic* or *James's powder* may be added to it, which will determine to the surface, and tend to remove any constriction of the cutaneous vessels. Other antispasmodics, after the removal of plethora, may be prescribed, and if the cough be violent and of the convulsive kind, the *Flowers of Zinc* have been found very serviceable*.

Q

4. Another

* Vide Dr. Percival's Observations, p. 223.

4. Another case to be considered is, when the convulsive Asthma is *complicated* with the *humoral*, and when, the convulsive being removed, the humoral still continues. I have observed, that this is a common occurrence, and gives a most distressing disease, distinguished by sudden difficulties of breathing, supervening on continual stuffing of the breast, and expectoration of thick phlegm. In the interval of the convulsive Asthma, when the humoral remains, a gentle vomit is proper, with a view to cleanse the stomach and to promote expectoration. *Ipecacuan* and *tartar emetic* answer this purpose. The use of expectorants and demulcents is recommended, as *squills*, *garlic*, *gum ammoniac*, *volatile alkali*, *balsam of Peru*, and *oily mucilaginous medicines*. The first are stimulating, and therefore serviceable in cases of tough viscid phlegm. The last are not heating, and are beneficial when there is a thin acrid defluxion on the lungs, and a complication of any inflammatory affection of those parts. *Blisters* and *issues* are often very serviceable in the humoral Asthma. When the cough is teasing in the night, and disturbs the patient's rest, a dose of *tinctura thebaica*, *purgative elixir*, or *pure opium*, is indicated, provided the patient be not too weak, nor the
air-

air-vessels too much loaded with phlegm, so as to render the operation of those remedies hazardous. Other *antispasmodics* may be employed, as *camphor*, *asafætida*, *castor*, &c. especially when nervous and hysterical symptoms are complicated with the humoral Asthma, in which case oils and mucilages often ferment, turn rancid or sour, and disorder the stomach. The *Flowers of Zinc* likewise, I have frequently given with success, as a more powerful antispasmodic, in the intervals of the convulsive Asthma, when, after the fit, a violent cough and stuffing in the breast has continued to harass the patient. The occasional employment of the *warmer laxatives* is very necessary, in gross phlegmatic habits and in obstinate costiveness.

Some physicians, in this case, recommend, in the strongest terms, the *removal* into a *warm climate*, as highly useful and necessary, especially when the humoral Asthma precedes the convulsive, and the latter seems to be a consequence only of the former. One may often form a good judgment concerning this matter, by attending to the effects of warm and temperate weather on the patient's constitution. If he is much better in summer than he

is in winter, it is very probable that a *change of climate* may prove *highly beneficial* to him. But in the pure convulsive Asthma, we have already had occasion to observe, that very hot weather is pernicious.

5. But if, in the intervals of the asthmatic fits, the patient enjoy a *good state* of health, if his constitution be neither full and corpulent, nor relaxed and irritable, and there be no remaining symptoms of the humoral Asthma, the free use of medicines is by no means to be advised. It will not, however, be improper, in this case, to attend to the state of the body, and to obviate costiveness, when present, by a gentle *laxative*; or if the stomach be affected with flatulency, or any other slight symptom of indigestion, to prescribe a strengthening medicine, such as a light preparation of *steel, bark, or bitters*, made cordial with the *aromatic tincture*, along with regular living, cool pure air, moderate exercise, and the cold bath.

CASES

C A S E S

A N D

OBSERVATIONS.

Τῷ δὲ φθινοπώρῃ, καὶ τῶν θερινῶν τὰ πολλὰ, καὶ πυρετοὶ
τεταρταῖοι, καὶ πλάυνηες, καὶ σπληνῆνες, καὶ ὑδρωπες, καὶ
φθίσεις, καὶ τραχηρίαι, καὶ λειψυρίαι, καὶ δυσεντερικαί,
καὶ ἰσχιάδες, καὶ κυνάσχει, καὶ ἄσθμα, καὶ εἰλεοί,
καὶ ἐπιληψίαι, καὶ τὰ μανικά, καὶ τὰ μελαγχολικά.

HIPPOCRAT.

*Longum iter per precepta; breve et efficax per
exempla.*

SENECA.

C A S E S

A N D

O B S E R V A T I O N S.

THE following CASES of the Asthma, which are here presented to the public, have been collected together with great care and attention, and will, I doubt not, be found a true and faithful representation of nature.

I have not contented myself with giving those cases only, which were easily and quickly cured, but I have carefully collected many, in which the relapses were frequent and violent, the prognostic long doubtful, and the cure tedious and difficult.

In

In some of the following cases, the Asthma is not the principal disease, but complicated with another, far more dangerous. If any one should object to such a case, as not being proper to be admitted here, it is answered, That the intention of the following cases is to give a tolerably compleat account of the Asthma, not only in its more pure state, but in that in which it is highly complicated with the most dangerous, and sometimes fatal, diseases.

Several cases of infants likewise have a place in this collection, which may, perhaps, be objected to by some; but, in my opinion, without any just foundation, as their lungs are very irritable, and they are certainly liable to this disease, to a most alarming and dangerous height. Some, not accustomed to the diseases of children, may very easily mistake the Asthma for another complaint, as infants are unable to express their sufferings, and parents often at a loss to give an exact account of them. In our inquiries into the symptoms of the Asthma in a child, we should ask concerning the frequency and violence of the cough, and desire to know whether it be preceded or attended with a wheezing and laborious respiration, which comes on suddenly by fits. We should observe whether

whether any phlegm be raised into the throat by means of the cough, for that will shew the lungs to be affected. We may inquire if the child be able to swallow well when the fit is off, which, answered in the affirmative, will prove that the primary complaint is not an inflammation in the throat. It will likewise be proper to examine into the state of the abdomen, to know whether it be soft and natural, or full and inflated with wind, or obstructed with any hard tumors, impeding respiration.

Such were the cases of the Asthma, which I had to treat, and such, under the blessing of providence, I have often been able to cure. The *Flowers of Zinc*, I must honestly confess, have assisted me in my greatest difficulties; and as this is a remedy in common use among physicians for other convulsive complaints, and one which may be given with the most perfect safety, I have had frequent recourse to it, and (I may truly add) with success. At the same time, I would recommend it to practitioners to examine carefully the preparation of the *Flowers of Zinc* which they employ, lest the calcination of them should be imperfect, and the medicine consequently less active and less efficacious. Some perhaps may

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be

be ready to object to this remedy, that it does not succeed in the disease for which it was first introduced into practice, that is, the Epilepsy or Falling Sickness. To this we may answer, That no other remedy, hitherto known, has succeeded in curing, with the least degree of certainty, that most dreadful malady. This objection, therefore, if it be allowed to have any weight, is equally strong to prove that the bark, opium, venesection, &c. are remedies of no value.

But I should much rather wish the reader to judge for himself from the real effects of the remedy, than from any thing I can say in its favor. I shall only beg leave to call his attention to one or two particulars. First, The dose, in which I give the *Flowers of Zinc*, is much greater than has commonly been employed. Two or three grains, though as much as some very delicate stomachs can bear, yet is far too small a dose in general to have any good effect in the cases of adults. Secondly, I was never called at the first attack of an Asthma to any patient, where the *Flowers of Zinc*, which have a tonic as well as antispasmodic power, were necessary. Indeed most of the patients, whose cases were treated with that remedy, had labored under

under their disorders for some time before I saw them, and many indeed for a very long time.

But though the *Flowers of Zinc, Vinegar of Squills*, or any other remedy, is particularly specified under a general head, the reader is not to expect in all cases that it is employed alone. The assistance of other remedies is often absolutely necessary. For example; if *Zinc, Camphor, Asafetida*, or the *Peruvian Bark* were employed, a *laxative, blood-letting*, or an *opiate*, or even *all three*, may be so strongly indicated, as to render the practice very imperfect and unsuccessful without them. Too great simplicity in the practice of physic is certainly an error, as well as too great a variety of medicines given at one and the same time. The practice which I have adopted through the whole of these cases, was not directed by a partiality to any one particular remedy, but was such as appeared to me the most likely to cure my patient in the safest and speediest manner.

The OBSERVATIONS follow the case; and if the Asthma be complicated with any other disease, I am obliged to say something on that disease with which it is complicated. This leads to a

variety of remarks on different diseases, as well as on the Asthma, which remarks, it is hoped, the reader will not consider as digressions, when he reflects that they are not made on the Asthma alone, but on the Case in its complicated state. These cases, therefore, will shew the disorder as it occurs in real practice, and not as the imagination may paint it. I have only one request to make to the young reader, and that is, not to run hastily over the difficult and complicated cases; but, after having read the observations, to re-examine each case, and to reflect awhile upon it, otherwise he will not reap any lasting advantage, so as to convert the knowledge of it to his own use, whenever he may meet with a similar case in practice.

The *order*, in which the following cases are placed, is not that in which they were first taken, but that which I hope will prove the most easy and agreeable to the reader. Many of the observations upon the cases likewise were written, when the cases stood in their first order, namely, that in which they were first taken. For this reason, some of the observations, that were made early, will occur later than they were intended. But I flatter myself the reader will find no inconvenience from
this

this alteration of place; and if there were any, the advantages gained will more than compensate for it. Had the cases stood in the order of time, as I first had them under my care, some of the most tedious, difficult, and complex, would have occurred at the beginning, which would have been particularly unpleasant to young students, and to such as have not given minute attention to this disease, and therefore are not perfectly acquainted with the great variety of its appearances, under different complications with other complaints,

Many of these cases were taken at the York County Hospital, with a view only to do justice to the patients, that, through hurry of business, I might not overlook or neglect any thing of consequence in the cure. My Dispensary likewise, (at which the poor attend) as well as private Practice, have furnished me with some. But the whole contained in this publication are only a few examples, selected out of a great number of others.

The Zinc cases stand first in order, and are divided into two parts; and the rest of the cases which follow, and were treated by a variety of different remedies, are divided into
three

three parts *, and under each of them the principal remedies employed are enumerated, which will in some degree shew the reader what he is to expect, and likewise assist the memory in referring to particular cases. Besides, as the diseases, which are treated by the same remedy, are placed one after another, the remarks made on the first will apply, in a great measure, to those which follow, and so prevent repetitions.

With regard to the *regimen* made use of in these cases, it is according to the directions already delivered in the preceding part of this treatise. To patients in general, when they attend upon me, they are cautioned to eat nothing but very light food, and such as they find by experience to be easy of digestion; and of that even to take only a little at a time, lest their stomachs should be distended, and the difficulty of breathing increased. The drink, which is recommended, is toast and water, milk and water, whey, lemonade, &c. which ever agrees best, and occasionally a little good wine or spirits are added, whenever the symptoms of the disease require them. The patient is desired to avoid excess of heat from large fires, small hot rooms, close curtains, too many bed-clothes,

* Vide table of contents.

clothes, &c. all which are particularly hurtful and distressing to Asthmatics. If a patient live in a very small low damp room, the absolute necessity is pointed out to him of changing his habitation for one more dry and airy. Or if he be engaged in an unwholesome employment, he is made sensible of the danger of continuing it, and advised, if possible, to follow another. A little gentle exercise in the open air, either by walking or riding, according to the patient's habits and inclination, is generally approved of in the absence of the fits, with a caution to him at the same time to be very much upon his guard against catching cold, from any imprudent exposure to it, particularly when heated. This hint is of great consequence towards preventing relapses, and should be the most attended to by the patient at those seasons of the year, be they hot or cold, when relapses are the most apt to come on. After these general remarks, it will be needless to repeat directions concerning regimen in the case of every patient; but when regimen is not mentioned, the reader must not suppose it is neglected; for I have great confidence in a good regimen, and in the avoiding of the occasional causes of diseases. If any thing occur in a case, which requires a particular regimen, then proper notice will be taken of it.

With

With regard to several of the common *forms* of prescriptions employed at the York County Hospital, it will be needless to trouble the reader with inserting them at large among the cases, as they differ very little from those which are in use at other Hospitals, and which are published every day for the benefit of students. But lest any one, if those prescriptions are not specified at all, should think me guilty of an omission, the different *formule* employed are thrown together at the end of the book, which method seems preferable to the insertion of them singly among the notes, as the reader can in other cases turn to them more readily without any further reference. It must at the same time be observed, that any other prescriptions of importance will be given at large in their proper places, and the doses of active medicines exactly ascertained.—With respect to a Patient's continuing the use of any remedy prescribed, it seems unnecessary to subjoin the repetition of that remedy at the end of every report in a case; but we would wish the reader to understand, that every remedy is supposed to be continued, till the intermission of it is particularly mentioned.

C A S E S

PART I.

CASES of ASTHMA,

Treated *successfully* with the

FLOWERS of ZINC,

After several other remedies had failed.

CASE I.

The Convulsive Asthma, complicated with a Senile Catarrh, of several years standing, cured by the use of the Flowers of Zinc.

ROBERT SMITH, aged 51, admitted a patient at the York County-Hospital, February 3, 1777, has been subject, for many years past, to an Asthma, particularly in the winter season, which has greatly weakened and
S impaired

impaired his constitution. Along with a cough, he is attacked in the night with a difficulty of breathing, which comes on suddenly, and continues with great violence for several hours. He complains too of want of sleep, constant thirst, head-ach, and soreness in his breast. His body is regular, pulse low, tongue clean, appetite bad, expectoration difficult.

Mistura mucilaginosæ *. *Dosis unciæ duæ ter die.*

Haustus Anodynus cum Tincturæ Thebaicæ guttis quindecim, hora somni. †

Pilularum Rufi duæ vel tres pro re nata, quando alvus astricta sit.

The 6th. The symptoms are nearly the same as before. His body is open with the pills; but he still continues to have very restless nights, in consequence of his cough and difficulty of breathing.

The

* This, and other common forms of prescriptions, such as the *Mistura ad Asthmaticos*, *Julepum Commune*, &c. will, for the reason before-mentioned, be found each under its proper title at the end of the cases.

† The common form of the Anodyne Draught is made up with twenty drops of *Tinctura Thebaica*; but when a smaller or a larger dose is given, it will always be taken notice of as above.

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The 13th. The symptoms continue. Head-ach troublesome.

Repetatur Haustus Anodynus, addendo Tincturæ Thebaicæ guttas quinque.

The 17th. He thinks himself a little better to-day, but complains more of soreness and uneasiness in his breast.

Applicetur Emplastrum Vesicatorium inter scapulas.

The 20th. The blister answered well, and he is somewhat better.

The 23d. His cough, stuffing and soreness in his breast, are rather worse, attended with a very scanty expectoration. He finds a little relief from the opening pills and the anodyne draught, but complains to-day of great languor and weakness. *Omittatur Mistura Mucilaginosæ.*

Sumat Misturæ ad Asthmaticos unciam unam ter die.

Repetatur Haustus Anodynus & Pilulæ Laxantes.

The 27th. Early this morning he was seized on a sudden with greater difficulty of breathing, and more violent stricture over his breast than

usual, so that he was scarce able to speak. He wheezes and coughs much at times, but gets up little or no phlegm. His weakness and langour are increased, and he has a pain in his head. *Omittatur Mistura ad Asthmaticos.*

Sumat Florum vel Calcis Zinci grana duodecim bis die in Julepi communis uncias duabus.

Repetantur Haustus Anodynus & Pilule Laxantes.

March 3d. He was not sick with the powder. His breathing is more free, his cough is easier, expectoration more copious, and he finds himself stronger.

The 8th. He continues much better in his cough and difficulty of breathing, and feels no stricture or soreness across his breast, but complains of head-ach and sickness at times, and says that he has been accustomed to be bled every spring for several years past.

Fiat Venesectione ad uncias quatuor.

The 13th. He still breathes better, coughs but little, rests well, and is stronger. Pulse regular and not quick. The bleeding relieved his head-ach and sickness.

Sumat Florum Zinci grana viginti omni dosi.

The

The 17th. He is not sick with the increased dose of his powder. He has had no return of his difficulty of breathing, and his cough has almost left him, although the weather is very unsettled, sometimes soft and wet, and sometimes frosty, along with high winds.

The 20th, He is free from complaint. Let him be dismissed.

In this case, which is a complication of the Senile Catarrh and the Convulsive Asthma, several powerful remedies, whose virtues are well known, were tried before we made use of the *Flowers of Zinc*. The success of this last remedy was very evident and striking. Its operation was that of removing the spasm of the lungs, obviating the difficulty of breathing, promoting expectoration, and strengthening the constitution,

This man was of a weak habit of body, and had been subject to his disorder for many years; on which account it was proper to avoid copious bleeding, purging, and other strong evacuations. Profuse sweating (altho' it sometimes afford a temporary relief) is a practice which I never recommend in the Asthma, as it
weakens

weakens and relaxes the constitution, renders the patient very susceptible of cold, and consequently more subject to relapses. For the same reason, too much external warmth and confinement, at the commencement of this disorder, has sometimes a very unhappy effect. The Patient's body was kept gently open with the *Pilulæ Rufi*, and his nights were rendered easier with the *Tinctura Thebaica*.

As I had frequently given the *Flowers* of *Zinc* in other asthmatical cases before this, and was tolerably well acquainted with their operation and medical virtues, I began here with a dose of twelve grains, and afterwards increased it to twenty, which last (if the medicine be in good condition) few stomachs can bear without sickness or vomiting. The *Flowers* of *Zinc* having succeeded in several cases similar to this, in which other medicines had failed, I was gradually led to form a good opinion of their efficacy, and further experience has still confirmed me more strongly in their favour.

CASE

C A S E II.

The Convulsive Asthma, complicated with the Humoral, of many years standing, in which the Flowers of Zinc were given with Success.

ELIZABETH WHITELEY, aged 30, admitted at the York County Hospital, February 3, 1777, is subject to a cough and difficulty of Breathing, with soreness and stuffing in her breast. She has had an Asthma for several years, which at present is very severe. She complains of head-ach, thirst, loss of appetite, and difficult expectoration. Her sleep is very much disturbed in consequence of her asthmatical complaint, which is often so great in the night, that she is unable to lie down. Her body is regular. She had a child six months ago, to which she now gives suck, and she has had no return of her menses since her delivery. Her pulse is small, weak, and quick, and her general habit of body much reduced. She attributes her complaint to frequent and sudden exposures to heat and cold.

Sumat

*Sumat Misturæ Mucilaginosæ uncias duas ter die;
& Haustum Anodynum cum Tincturæ Thebaicæ gut-
tis duodecim omni nocte hora somni.*

The 6th. The symptoms continue. She still expectorates with difficulty, is feverish, and complains of head-ach.

Haustus Emeticus vespere sumendus.

The 13th. Her Asthma continues as before, but she finds herself somewhat less feverish. The Emetic operated well, and her expectoration is a little freer. *Omittatur Mistura Mucilaginosa.*

Capiat Misturæ ad Astmaticos unciam unam bis die.—Repetatur Haustus Anodynus.

The 17th. The symptoms are nearly the same. She was not sick with her Mixture.

The 20th. Her cough is increased, and she is more stuffed in her breast. Her asthmatic mixture disagrees with her. *Omittatur Mistura ad Astmaticos.*

Sumat Misturæ Salinæ uncias duas bis die.

Repetatur Haustus Anodynus, addendo Tincturæ Thebaicæ guttas octo.

The

The 23d. She complains much at present of her cough and shortness of breath, with straitness and soreness at the pit of her stomach. Her body is regular; appetite bad, head-ach severe, stomach foul, and she sleeps very ill at nights.

Haustus Emeticus vespere sumatur.

The 27th. She vomited freely with the emetic on the 23d, and threw up a considerable quantity of viscid phlegm. On the 25th and 26th she had a very severe return of her Asthma, which, as usual, came suddenly upon her, and was attended with wheezing, anxiety, and great difficulty of breathing. Her respiration is still laborious. When she moves suddenly, she finds the anxiety and oppression at her breast much increased; but when the fit is off, and she is at rest, her breathing is tolerably free and natural. *Omittatur Mistura Salina.*

Capiat Florum Zinci grana duodecim ex Julepi Cardiaci unciis duis bis die. — Repetatur Haustus Anodynus ad cubitum eundum.

March 3d. She is sick at times with the powder. She says that she has got a little fresh
T cold,

cold, which has increased her asthmatical complaint.

Continuentur remedia.

The 6th. She finds her cough and difficulty of breathing much diminished. She is still sick at times with the powder, but her expectoration is more free and easy. She has no thirst, head-ach, or any other feverish symptom, and her appetite begins to return.

The 13th and 17th. She continues to recover.

The 20th. The air is damp, the weather rainy and changeable. She has got a little cold which has increased her cough, but she has had no return of her Asthma.

The 24th and 31st. Her cough is much better, her countenance clearer, appetite improved, pulse fuller, and she gains strength every day.

April 7th. She is free from complaint. Let her be dismissed.

In

In this case the Flowers of Zinc sometimes created a slight degree of sickness, which is a common effect of them when given in a full dose. I did not, however, change the mode of exhibition on that account, as few things promote expectoration better than nauseating doses of emetics, and as I had sometimes found the Flowers of Zinc to operate in that way very powerfully. But if that medicine had often occasioned sickness, then it would have been necessary to have diminished the dose of it, till the stomach could have borne it with ease.

C A S E III.

The Convulsive Asthma complicated with the Humoral Asthma, Rheumatism, Chronic Weakness, and Obstruction of the Menses, in which the Flowers of Zinc were very successfully employed.

ELIZABETH PARKER, aged 18, admitted into the York County Hospital, June 12, 1777, complains of a cough, spitting, and difficulty of breathing, which last symptom frequently comes on in a very sudden manner, particularly when she first wakes in the night,

and continues very severe for some hours. She has had a pain in her breast for three weeks past, which is increased by motion and coughing. Her countenance is pale, pulse weak and quick, body regular, appetite bad, sleep much disturbed. She had her menses a fortnight ago, but they are not regular; for sometimes they do not appear in less than six or seven weeks; and sometimes they return in two or three weeks. She assigns no cause for her complaint.

Sumat Julepi ex Spiritu Nitri dulci uncias duas sexta quaque hora ;

Balsami Glycyrrhizæ sesquidrachmam bis die ex quovis vehiculo ; et

Haustum Anodynum cum Tincturæ Thebaicæ guttis quindecim omni nocte hora decubitus.

Applicetur Emplastrum Vesicatorium inter scapulas.

The 16th. The blister answered well; her nights are rather easier with the draught at bedtime; the julep and balsam of liquorice agree with her stomach. The pain in her breast is much abated, and she breathes a little better. Her body is bound, pulse slower.

Continuentur remedia & injiciatur Enema commune pro re nata.

The

The 19th and 26th. She continues to recover. Her fits of difficult breathing still recur at times, but are less violent. She has an easy stool every day with the glister.

July 3d and 7th. The pain in her breast is entirely removed, and the other symptoms are easier; but she has no expectoration. She has many blisters of considerable size on her lower extremities, which first began to appear a day or two ago, and are now very sore and painful. They were preceded with a slight degree of low fever, which still continues.

Repetantur remedia.

The 10th. The blisters on her legs and thighs are dying away. Her cough is better; but she is much disturbed in her breathing. Let her be made an Out-patient at her own desire.

The 15th. She has some return of pain in her right side, and is much stuffed in her breast.

Linimento Volatili pars dolens inungatur.

The 21st. The pain in her side is relieved by the liniment, but she has an increase of her
cough,

cough, stuffing, and shortness of breath, with a very scanty expectoration.

Capiat vespere Haustum Emeticum.

The 24th. The emetic operated well. She complains still of stuffing in her breast, and is much troubled with shortness of breath, wind, and fulness at her stomach. The air is damp and the weather rainy. Let her be again made an In-patient.

Repetantur remedia.

The 28th. The pain in her right side is very severe. Her other complaints are the same.

Applicetur Emplastrum Vescatorium lateri dolenti.

Sumat Misturæ Pectoralis uncias duas ter die, et amittantur alia remedia.

The 31st. The pain in her side is relieved by the blister. Other complaints the same.

August 4th. She was attacked suddenly last night with a violent difficulty of breathing and sense of straitness across her stomach, which still continues, altho' at present with less severity. Her legs swell towards evening.

Sumat bolum bis die ex Florum Zinci granis quinque, & conservæ cynosbati scrupulis duobus.

The

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The 7th. Her difficulty of breathing was considerably diminished with the second dose of the Flowers of Zinc, and has continued better ever since. She has a small tumor on her neck, which gives her pain. Let Mr. Favell be desired to see it.

The 11th. Mr. Favell has ordered the application of the Emplastrum Mercuriale to the tumor on her neck, which has relieved her. She has had no return of her asthmatical complaint, and the swelling of her legs is better.

The 14th, 18th, and 30th. No cough, stuffing, or difficulty of breathing.

September 4th. No complaint. Let her be dismissed.

Here the humoral and convulsive Asthma, rheumatism, chronic weakness, and irregularity in the menstrual discharge, all occurred in one and the same patient. I tried first to remove her Asthma by the common methods of practice. She had the tinctura thebaica, balsam of liquorice, dulcified spirit of nitre, and a blister on her back. As she was of a weak and delicate

delicate constitution; her body was kept regular by the use of glisters. The volatile liniment and a gentle emetic was likewise tried, but without any lasting good effect. Afterwards another blister was put on; and she took the pectoral mixture, but still her Asthma grew worse, notwithstanding that the season of the year might be thought favorable. On the 4th of August, after having tried those remedies without success for near two months, the Flowers of Zinc were prescribed in a dose of five grains, which was as much as her weak stomach could bear with ease, and the effect of it was such as exceeded my expectation; for she found immediate relief in the spasms of her lungs; and all her other complaints were afterwards speedily removed.

It appears to me, on a review of the cases of Asthma which have occurred to me in practice, that the volatile liniment, which was made use of in this case, (and which is daily recommended by Physicians in similar ones) had a bad effect. It is true, indeed, that it removed the rheumatic pain in her side, for which it was prescribed; but in the same report of the 21st of July, her cough, stuffing, and difficulty

difficulty of breathing were all increased. The application too of the last blister (for which likewise common practice may be pleaded) was attended with relief of the pain in her side; but in a few days after she had a very severe attack of her Asthma. *

The tumor on her neck, in all probability, had its seat in a lymphatic gland, and was a very* unfavorable appearance, as it denoted strongly that she was afflicted with tubercles in the lungs; and indeed her age, general habit, and the obstinacy of the symptoms concurred in proof of the same.

U

The

* Nothing is more common than for the rheumatism to leave the external parts, and to fall upon the internal, particularly the throat, lungs, stomach, or bowels. I know a Lady, in whom the rheumatism has very often changed places, passing from her side to her throat, from her throat to her eyes, and from her eyes to her lungs, where it was attended with cough, soreness in the breast, and some degree of shortness of breathing. But these pulmonary complaints disappeared as soon as any inflammation returned into her eyes, or any external pain became fixt in a muscular part. I have seen several other cases of the same kind, both in men and women; from which it appears to me, that the practice (which is a very common one, and often successful) of driving the rheumatism away from an external part by means of external applications, is sometimes attended with bad consequences, particularly in weak constitutions. Several striking examples of a similar nature will be found among the following cases.

The vesicular eruption, the blebs or pemphigus (as Dr. Cullen terms it) which this patient had on her legs and thighs is a very uncommon disease. Dr. Cullen, notwithstanding his very long and most extensive practice, affirms that he never saw an instance of it*. He has, however, given an accurate definition of this complaint, collected with great judgment from those authors who have seen it. *Typhus contagiosa. Primo, secundo, aut tertio morbi die, in variis partibus vesiculæ, avellanæ magnitudine, per plures dies manentes, tandem ichorem tenuem effundentes*†. In the case of Elizabeth Parker, the vesicular eruption, which was very sore and painful, was preceded and accompanied with some feverish symptoms evidently of the low kind. It continued only for a few days, and then gradually went off. As it was so mild, it did not require any

* Vide First Lines of the Practice of Physic, p. 116.

† The following are the definitions of the same disease, as given by (1.) Sauvage. (2.) Linnæus, and (3.) Vogel.

1. Eruptio Phlyctænarum Avellanæ circiter magnitudine fero dilute flavo turgidarum.

2. Phlyctænæ aliquot in abdomine five artubus, magnitudine avellanæ. Febris Diaria, malignissima, funestissima.

3. Maligna, (Bullosa) vesiculæ fero sublimpido repletæ, magnitudine nucis avellanæ & majores, in variis corporis partibus, facie non excepta, citra cutis inflammationem erumpentes.

Vide Synop. Nos. Method.

any particular treatment; but had it been violent, and attended with a malignant nervous, or putrid fever, the bark, elixir of vitriol, red wine, and stimulants, would have been highly necessary. By that method of treatment, not entered upon too hastily, nor delayed too long, I cured two patients a few years ago of the Pemphigus or vesicular disorder, in which the fever was extremely putrid, and a great many gangrenous sloughs, of a foetid smell and most dreadful appearance, followed the eruption of the blisters, attended with a low delirium for many nights, and the greatest dejection of countenance and prostration of strength.

C A S E IV.

The Convulsive Asthma complicated with an obstinate cough of three years standing, on which a recent catarrh supervened, cured by Blood-letting, Flowers of Zinc, &c.

ANN SHAW, aged 50, admitted at the York County Hospital, December 5, 1782, complains of feverishness, pain in her stomach and left side, difficulty of breathing, and a violent cough of three years standing, which

increases her pain, and leaves a foreness in her breast, but is attended at present with little or no expectoration. Her difficulty of breathing is very severe, and comes at times suddenly upon her, particularly when she walks across a room, or goes up stairs, so that she is then almost afraid of suffocation. She has had no menses for twelve months past, except three very slight appearances, which continued only for an hour or two. Her pulse is moderate, and her constitution not weak. Her disorder has been gradually growing worse this last year; but the symptoms of it have greatly increased in violence for five weeks past. She was bled ten days ago, but without any sensible relief. Her body is bound. She has a great weakness in her knees and ancles, so that she can scarce walk. Her belly is much swelled at times, but the swelling goes off in an hour or two. She has a very troublesome itching and prickling all over her skin, both when in bed and up. Her constitution can neither bear much heat nor cold.

Mittatur sanguis ad uncias decem.

Capiat Misturæ ex Spermate Ceti sesquiunciam ter die; & Pilularum Rufi duas vespere & unam mane, pro re nata.

The

The feverishness being abated, but the symptoms of the Asthma continuing violent, I ordered her on the 9th to take *Florum Zinci grana sex ter die ex thea Menthae vulgaris*, and to make use of the opening pills occasionally, three of which every other day answered very well. The spermaceti mixture made her sick, and therefore was omitted.

On the 23d the pain in her stomach was almost gone; she breathed with much more ease; her spitting was freer and less glutinous; her joints stronger, and she was able to walk better. Her cough, however, continued troublesome, attended with a pain in her side, and she was sometimes sick with the powders.

On the 22d of January, by continuing the same remedies, she was free from all her asthmatical complaints, except her cough, which was still severe at times, and brought on a pain in her breast. We afterwards gradually diminished the dose of the Zinc, as it excited sickness, till she took only three grains at a time; and on the 24th of February her cough and spitting were entirely removed, and she had no complaint remaining.

In

In this case, the pain of her side and the violence of her cough required bleeding, and more especially as her constitution was not weak, and the menses were leaving her. The first bleeding gave no sensible relief, and the good effect of the second was not immediately visible, though I doubt not but they were both conducive to the cure. I have often observed in cases where this remedy was evidently indicated, that a first bleeding has been of no apparent benefit, when a second has proved very serviceable.

The violence of the cough increased the pain and soreness of her breast, which (one would think) should naturally make her cautious, when coughing, not to exert herself too strongly. I throw out this hint the more particularly, because I see every day many Asthmatics, who injure their lungs materially by exerting themselves too violently when coughing, and who consequently assist the disease in bringing on partial inflammations, effusions, and obstructions, ruptures of blood-vessels, spittings of blood, &c.

This case affords a very remarkable instance of the good effects of the Flowers of Zinc, which
(though

(though given but in a small dose) not only took off the spasmodic affection of the lungs, but also removed an old obstinate cough of three years standing. Indeed, I was afraid, we should not have succeeded so well in this last part of the cure; for sometimes coughs are extremely inveterate and difficult to overcome, resisting every attempt which we can make, and that even in cases where we hoped to have been able to have removed them without much difficulty.

The itching and prickling of her skin which she complained of, seemed to arise from an acrimony or impurity of the blood, commonly called *scorbutic*, which probably had its origin from poor diet, bad health, and want of *exercise*, that great sweetener of the blood and corrector of acrimony. A sedentary life often produces foulness of the blood, itching of the skin, cutaneous eruptions, inflammation of the eye-lids, and other symptoms of the scurvy.

CASE

C A S E V.

The Convulsive Asthma, complicated with the Humoral, in a patient of sixty years of age, who had labored under this disorder from childhood, and was become violently affected with anasarcaous or dropfical swellings in the cellular membrane, particularly of the lower extremities, relieved by Blisters, Laxatives, Diuretics, and the Flowers of Zinc.

RACHEL ATKINSON, aged 60, admitted into the York County Hospital, May 25, 1780, of a thin emaciated habit, and always accustomed to an abstemious manner of living, has been afflicted with an Asthma from her childhood, which is at present so very severe, both with respect to the cough and difficulty of breathing, that she is extremely weak and unable to lie down in bed. It generally attacks her about two or three o'clock in the morning, and lasts for eight, ten, or twelve hours. She has likewise dropfical swellings in both her legs and thighs, which are the worst towards night, and pit much on pressure. These swellings came on last March, and have now distended

distended the skin so violently, as to produce universal redness and inflammation on the lower extremities. Her body is bound. She has had no return of the menses for many years past. She says that her Asthma is always the worst in thick damp cloudy weather, in all sudden changes of the air, in rain and thunder, and likewise in the severity of the winter season; and that she is the best at all times of the year in mild clear settled weather. Her difficulty of breathing, after having continued a while, is followed by a violent cough, but she expectorates little or nothing. Her appetite is bad, pulse low, nights restless, urine high-colored and in small quantity.

Applicetur duo parva Emplastra Vesicatoria cruribus.

Sumat Oxymellis Scillitici drachmam unam ex Julepo Menthae ter die—Et Rhei Pulveris grana viginti mane vel vespere, quando alvi constipatio adfit.

The 30th. The blisters (four inches long and three broad) which were put on the calves of her legs answered very well; her body is regular with the rhubarb; and she makes water rather more plentifully, but the oxymel of squills does not sit easy on her stomach.

Continuentur remedia.

X

Her

Her asthmatical complaint continues nearly as usual; though, if any thing, it is rather better.

Omittatur Oxymel Scilliticum & capiat Misturæ Diureticiæ coctlearia tres vel quatuor ter die.

June 5th. Her legs and thighs are less swelled, and her asthmatical complaint is a little easier; but the discharge from the blisters is almost stopped.

The 8th. The swelling of her legs and thighs still continues to diminish; her urine is rather paler and increased in quantity; and the symptoms of her Asthma are less violent.

Applicetur duo parva Emplastra Vesicatoria cruribus, & repetantur alia medicamenta.

The 12th. Her blisters answered, and discharged tolerably well. Her cough and asthma are rather better.

The 15th. Her blisters continue to discharge. Her Asthma is less troublesome in the night, so that she sleeps somewhat easier, though she is still unable to lie down in bed. Her weakness is very great, but her appetite begins to improve.

The

The 19th. The symptoms are nearly the same.

The 25th. She finds herself better in her dropfical swellings; but her difficulty of breathing, though upon the whole less violent, is yet very troublesome at times, particularly in the night.

Capiat Pilularum ex Floribus Zinci duas mane & vespere *. — *Continuentur Pulvis Rhei pro re nata, & Mistura Diuretica ut antea.*

July 3d. The swellings of her legs and thighs are much better. Her Asthma comes on every morning at four or five o'clock, and lasts about an hour, though sometimes it is more severe and lasts for several hours. Her pills agree well with her stomach, and her body is regular with the rhubarb.

The 6th. Her Asthma is better, but she is still much affected by all sudden changes of weather.

Sumat Pilulas Zinci tres bis die.

The 13th. Her Asthma still continues easier, though sometimes the fit will last for an hour

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very

* See Prescriptions at the end of the Cases.

very severe, and end in a troublesome cough, but which, however, is now followed by a more copious expectoration. Her appetite is better, pulse more regular, the circulation freer, her sleep less disturbed, and the swelling and redness of the lower extremities almost entirely gone.

Continuentur remedia.

The 17th. Some nights she is not at all troubled with her Asthma, but had a feverer fit last night than she has had for some time past.

The 20th. Her Asthma, upon the whole, is much better. She has had two good nights, and finds herself considerably stronger. Her appetite continues to improve, and she has little or no swelling of her legs and thighs.

The 28th. Her dropfical swellings are entirely removed. Her Asthma continues much easier, and her breathing freer; she looks better in the face, and has recovered her strength very considerably. Let her be dismissed at her own request.

When

When we consider the age of this patient, and the duration of the disease, together with the violence of the symptoms, it will appear obvious, at first sight, that her case was truly deplorable. The violent dropical swellings of her legs and thighs (which were very alarming at her time of life) were symptomatic, arising from the great obstruction of her lungs, and the difficult circulation of the blood thro' the pulmonary vessels, in consequence of which the vena cava must necessarily be loaded with blood, and the general circulation dangerously interrupted. I shall be honest enough to confess that I hardly expected to relieve her; but as the season of the year was favorable, I was resolved to try the power of a few remedies, hoping, that, as she had stood up against the repeated attacks of her present malady for near sixty years, she might even yet be able once more to struggle thro' it. The stamina of her constitution had been originally good, otherwise she would not, in all probability, have been at that time numbered among the living. This consideration ought to make one cautious not to give up old people too hastily; for, with a little well-timed assistance, they often recover beyond all expectation from very desperate diseases.

The

The indications of cure in this case were obvious. The application of blisters to her legs was to make an outlet for the watery effusions in the cellular membrane; and they had the desired effect. Scarifications in the ancles, with a lancet, might have been still more effectual as a drain, but the danger of a gangrene deterred me from that operation. As I found that blisters were evidently of service, I ordered a repetition of them when the first were dried up. Those discharges relieved her constitution from one load which oppressed it, and gave the powers of nature a fairer opportunity of exerting themselves for her relief; and accordingly we observed, that her Asthma grew better as the swellings of her legs and thighs diminished.

Her complaint was of a complicated nature; for the convulsive Asthma was combined with the humoral, in which serous effusions in the cellular membrane of the lungs evidently took place, and, along with the obstructed circulation of the blood thro' the pulmonary vessels, constituted some degree of the peripneumonia notha. It was this combination which rendered her disorder so very alarming in its appearance, and caused such a constant violent stuffing and laborious

laborious respiration, that she was not able to lie down, but by means of a bed-chair sat up for many nights together. In consequence of the humoral Asthma and great stuffing in her breast, opiates, notwithstanding her restless nights, could not have been given with safety. A common full dose of opium, in cases like this, has been observed to prove fatal to weak old people. The oxymel of squills did not agree with her so well as the diuretic mixture. Rhubarb answered the purpose of keeping her body regular, and the Flowers of Zinc were useful in diminishing the spasmodic affection of her lungs, and increasing the tone of her stomach.

C A S E VI.

In which the Flowers of Zinc were given with success in the Convulsive Asthma, following the removal of a complaint in the urinary passages, of three years standing, which arose from the stone and gravel, and was attended with bloody urine.

MARY BRAMLEY, aged 33, weak and low-spirited, was admitted a patient at the York County-Hospital, November 4, 1782, for

for a complaint in the urinary passages, in which there was a discharge of gravel, with great pain and frequency in making water. Her urine was often very bloody, and came from her when she walked. She was subject to a pain in her back, with wind and fulness at her stomach, and severe colic pains in her bowels. She parted with several small stones last week. She often had grumous coagulated blood in her urine. She found great uneasiness and difficulty in walking. Her nights were very restless and much disturbed with her frequent inclination to make water. Her complaint was of three years standing. She had had no return of the menses since her last child, which was weaned the other day, being then one year old.

In a month's time, by the use of laxatives, tinctura thebaica, oily mucilaginous medicines, mild alkaline salts, &c. along with a low diet, those complaints in the urinary passages were removed, her urine was of a natural color and came away easily, and she made water about five or six times only in 24 hours. She grew stronger and could walk very well.

On the 19th of December, she complained of a stuffing in her breast and a bad cough, which

which she had had for five days. Her cough forced away her water, but she had little or no expectoration.

Haustus Anodynus hora somni.

Pulveris Rhei, Magnesiae Albae, singulorum grana viginti pro re nata.

Mistura ad Asthmaticos uncia una ter indies.

On the 26th, notwithstanding the use of those remedies, her cough continued very bad, and along with it she had a difficulty of breathing which came suddenly upon her, and lasted sometimes for an hour and a half or two hours. She has had no return of her complaint in the urinary passages. The remedies were continued as above.

On the 2d of January, as those symptoms were not abated, as her cough was very close without any expectoration, and her difficulty of breathing so very severe in the evening, that she was almost choked for want of breath, and equally severe when she first waked in the morning, followed by sickness and vomiting, I ordered *Pulveris Florum Zinci grana septem ex Julepi cardiaci sesquiuncia ter indies*, along with

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the

the opening powder as before, and the anodyne draught with thirty drops of tinctura thebaica.

On the 6th she observed that the above dose of tinctura thebaica relieved the pain in her side, but did not procure her any more rest at nights. She was sick now and then with her medicines, but her cough and difficulty of breathing were much less violent.

On the 13th of February, by continuing regularly the use of the above remedies, her cough and other asthmatical symptoms were entirely removed, and she was dismissed cured.

In the treatment of this case, bleeding was avoided on account of her weakness and lowness of spirits: and blistering would have been improper on account of the complaint which she had had in the urinary passages; for the cantharides, taken up by absorption, might have stimulated the neck of the bladder, and have induced inflammation.

CASE

CASE VII.

*The Asthma, complicated with general convulsions
and spitting of blood, cured by the Flowers of
Zinc.*

MR S. ———, aged 35, May 16, 1786,
has a troublesome cough, and is at times
attacked with great shortness of breath, which
comes on suddenly by fits and lasts for several
hours, particularly on any motion, such as
getting into bed, going up stairs, or walking
too quick. Her Asthma does not come on
every day, though its returns are frequent,
especially against any sudden change of weather.

Besides the above-mentioned complaint, she
is generally seized once or twice a day with
strong convulsions, which sometimes attack her
along with the Asthma, and render her situation
most deplorable. She then lies insensible; her
chest seems quite bound down; the action of the
muscles of respiration is suspended; her breath-
ing is almost stopt; and blood and froth are
discharged from her mouth,

She has had an Asthma at times for several years past. The convulsion-fits have continued six weeks, but they are not equally frequent or violent every day. Sometimes she will remain insensible for several hours after they have left her. She attributes the present increase of her complaint in great measure to uneasiness of mind.

She had her menses three weeks ago, but they are not regular, for sometimes they return in a fortnight, and sometimes in a month or six weeks. She is of middle size, pale and thin, pulse moderate, spirits low and dejected, body bound, appetite bad. She had been bled twice, taken bark and laxatives, tinctura thebaica, castor, and other antispasmodics with little effect. A blister likewise had given her no relief. For the above-mentioned complaints, she had an issue set in her thigh, and the following remedies were prescribed.

R. Aquæ fontane uncias septem,

Aq. cinn. spirit. unciam unam cum semisse,

Tincturæ aromaticæ semunciam,

Florum Zinci drachmam unam,

Confectionis cardiacæ drachmas duas,

Fiat mistura, in haustus sex dividenda, quorum capiat unum ter die.

Fiat

*Sumat Infusi Rhei caculearia tres vel quatuor mane vel hora somni, quando alvus astricta sit. **

She continued the Zinc draughts with confection cardiaca for a fortnight, and, during that time, her fits of the Asthma and Convulsions gradually diminished in frequency and violence, till they had entirely left her. The laxative sometimes disappointed her, and was therefore changed for a common glister, an ounce of castor oil, haustus senæ purgans †, pilulæ Rufi, &c. all of which occasionally answered very well. She had afterwards two ounces of the following strengthening mixture three times a day.

R. Infusi

** R. Rhei semunciam,*

Aquæ bullientis uncias octo,

Aquæ cinnamomi spirituosæ unciam unam.

Mæora rheum cum aqua bulliente in vase clauso per noctem; deinde, addita aqua cinnamomi, cola. Edinb. Pharm.

This laxative, which is an excellent form of giving rhubarb, was sometimes rather heavy on her stomach, and therefore was occasionally made a little warmer, with the addition of a double quantity of the aqua cinnamomi spirituosæ, or of an ounce of the tinctura aromatica. It is well known, that rhubarb yields its virtues very perfectly to aqueous menstrua.

† R. Infusi senæ communis uncias tres,

Mannæ optimæ drachmas sex,

Salis de Rochelle drachmas tres,

Tincturæ senæ semunciam. Misce.

R. *Infusi corticis Peruviani uncias sex, †*
Salis absinthii drachmas duas,
Succi limonum q. s. ad plenam saturationem,
Aquæ cinnamomi spirituosæ unciam unam,
Tincturæ corticis Peruviani drachmas sex,
Syr. cort. aurant. drachmas sex. Misce.

This medicine, along with country air, gentle riding exercise, and a mild nourishing diet, soon restored her to a good appetite and perfect health. The spitting of blood entirely disappeared as soon as the convulsive and asthmatic fits were removed.

This case was a complication of convulsions and asthma, which was very terrible in its appearance. When I first saw her, the symptoms seemed to have continued with such unremitting violence for so many weeks, and her constitution was so much emaciated, that I despaired of her recovery, especially when I considered

† R. Cort. Peruv. crasse pulv. unc. unam cum semisse,
 Corticis aurantiorum incisi drachmas sex,
 Aquæ fontanæ libram unam,
 Aquæ cinnamomi spirituosæ uncias duas.

Misce & infunde sine calore per noctem, deinde filtra.—
Vide Percival's Essays, p. 74. where there is a very elegant and useful formula of a cold infusion of the bark.

considered what useful remedies had been already employed in vain. I was determined, however, to try the Flowers of Zinc, as I had often found them efficacious in the Asthma, and they had sometimes removed even obstinate diseases of the epileptic* and convulsive kind†. Nothing but a powerful antispasmodic could have taken off the complaint, and nothing could have answered better than the above-mentioned remedy had done. In this case, not only the spasmodic Asthma, but the general convulsions were removed; and the spitting of blood, which was a consequence only of the other complaints, disappeared along with them, as soon as a free passage was restored to the circulation of the blood through the lungs. Glisters and laxatives were absolutely necessary to obviate costiveness, and, when one laxative disagreed, another was ordered. The tonic as well as antispasmodic effects of the Flowers of Zinc were very serviceable to this patient, in whom the tone of the system was so greatly injured by the violence and duration of the convulsions and asthmatic fits. The cordial draught
was

* Vide Hume's Clinical Experiments, p. 219.

† I had lately two cases of convulsions after delivery, both of which were cured by the Flowers of Zinc given in a dose of ten grains three times a day.

was added to the Zinc, on account of her great lowness of spirits and general depression of strength. In this case the convulsions seemed to be a symptom of the hysteria, and not to partake of the nature of epilepsy.

Some years ago I had another case of the same dreadful appearance in a young woman of twenty years of age, being a complication of the Asthma and Hysterical Convulsions, together with violent vomitings and cramps in the stomach, swellings and hardness of the abdomen, spitting and vomiting of blood. Her pulse was small and her constitution delicate. She had had no menses for three months past. Her fits would sometimes be followed with loss of speech and insensibility, which continued for several days and nights. Small bleedings, glisters, laxatives, castor, tinctura thebaica, blisters, and other antispasmodics, along with gentle cordials, relieved her in time, and she has since enjoyed a good state of health. Those obstinate vomitings and spasmodic pains in her stomach were very alarming and distressing symptoms, and greatly interrupted the medical treatment; nay, sometimes obliged us to suspend it altogether, as she threw up every thing, even a mixture of barley water and

and gum Arabic. Her food too, though taken in very small quantities, was often rejected by vomiting. At one time this case likewise appeared so obstinate and desperate, that I left my patient without any hopes of success. Gentle laxatives, which kept her body in a regular state, were highly beneficial in preventing the returns of those violent vomitings and spasmodic pains in her stomach and bowels.

C A S E VIII.

The Convulsive Asthma, complicated with the Humoral Asthma and Excessive Corpulency, relieved by the Flowers of Zinc.

MRS. —, aged 49, April 1, 1776, is of low stature, but fat and corpulent, weighing fifteen stone. She is much troubled with flatulency and distention of her stomach. She has had no appearance of the menses for three years past. Her knees and ancles are weak and painful, which makes her walk lame. Her head often aches and feels heavy and dizzy, and her nerves are in a very irritable relaxed state. She is much stuffed in her breast, and has a bad cough. She is frequently attacked on a sudden with a stoppage in her breast, attended with wheezing and great difficulty of breathing.

ing, so that she is afraid even of instant suffocation. This fit comes on at different times, both in the day and night, and lasts about an hour, or sometimes longer. She is often feverish, and makes but little water. Her belly is swelled, pulse low, stools costive, expectoration difficult, and her nights very uneasy and disturbed. She is at times likewise subject to what she calls her nervous complaint, in which her head trembles, and her mouth is drawn to one side.

Mittatur sanguis ad uncias decem.

Applicetur emplastrum vesicatorium nuchæ.

Capiat pilularum Rusi duas vel tres pro re nata.

R. Aquæ fontanæ uncias quatuor cum semisse,

Confectionis cardiacæ drachmas duas,

Aquæ cinn. spirit. unciam unam cum semisse,

Spiritus corn. cerv. vel gutt. quadraginta.

*Fiat mixtura. Dosis cochlearia duo vel tres quinquæ
quaque hora.*

The 5th. Her blood is not sily; her body is open with the pills; the blister discharged freely; her mixture agrees very well with her stomach*. The complaints in her head and sto-

* She is frequently troubled with a coldness of her stomach when she takes any thing which is not of a warming nature; for which reason any cold medicine creates a load and uneasiness at the Præcordia.

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mach continue. Her cough is bad, her Asthma still severe, and her nights restless and uneasy.

The 12th. The swelling of her belly is less, but she still has the cough, stuffing, and difficulty of breathing as before. Her eyes are inflamed and painful. Her urine is high-colored and in small quantity.

Repetantur pilule Ruffi & mistura cardiaca.

R. *Aquæ Rosarum uncias octo,*

Sacchari saturni scrupulum unum,

Tincturæ Thebaicæ drachmam unam,

Spiritus vinosi tenuioris drachmam unam,

Subinde agitans, solve; deinde per chartam cola.

Fiat collyrium, sæpe in diem utendum.

R. *Spermatis ceti in pulverem triti,*

Gummi Arab. pulv. singulorum drachmas tres,

Conservæ rosarum rubrarum,

Conservæ Cynosbati, singulorum drachmas sex,

Syrupi balsamici uncias tres cum semisse,

Elix. vitrioli acidi q. s. ad grat. aciditatem.

Misce. Fiat Lohoch. Sumat cochlearium

unum parvum sæpe in diem.

The 19th. Her stools are regular, belly softer, other symptoms continue.

The 22d. She is less stuffed in her breast, and her pulse is stronger, but she is feverish every other day.

The 29th. She is somewhat better in the complaints of her head, stomach, and bowels, but the stuffing of her breast and difficulty of breathing continue. Her stools are easy, her eyes better, and her fever gone. Her legs swell towards evening, and she makes but little water.

Continuentur remedia, & repetatur mistura ut antea, addendo

Aceti scillitici drachmas tres,

Spiritus nitri dulcis drachmam unam.

May 3d. The swelling of her body is less, and she continues better in all respects, except her cough and sudden difficulties of respiration, which are as frequent and severe as usual, but still come on at no regular times.

Continuentur Loboch, Pilulæ Rufi & Collyrium,

R. Florum Zinci grana decem,

Confessionis cardiacæ scrupulum unum,

Conservæ rosarum rubrarum drachmam dimidiam,

Spermatit

Spermatis ceti grana septem.
Syrupo corticum aurantiorum fiat bolus.
Sumat bis die & superbibat coquelearia duo vel tres
julepi menthae.

The 6th. Her cough and difficulty of breathing are sensibly better, and she expectorates with more ease.

The 9th and 13th. She continues to recover, and has no swelling of her legs.

The 17th. She is materially relieved in her asthmatical complaint, and finds herself well in all other respects.

The Asthma of Mrs. ——— is one which affords a fair instance of success from the Flowers of Zinc, when bleeding, blistering, laxatives, and the volatile cordial mixture had been tried without effect. It must at the same time be admitted, that the medicines, which were first ordered, relieved several distressing symptoms, especially those in her head and stomach, and that, without those medicines, the Flowers of Zinc could not have been given with so much propriety and advantage.

What

What rendered her disorder more particularly distressing, was her *excessive corpulency*, which is justly to be considered as a disease, and certainly a very bad one too, as well as the forerunner of many others. This case indeed affords a striking example of the pernicious effects of corpulency in asthmatical disorders, and therefore well deserves to be attentively considered.

Mrs. — was 49 years of age, of low stature, and yet weighed fifteen stone, a load which reason forbid, and nature never intended her to carry. If she had not been so very corpulent she could not, from her size and make, have weighed more than ten stone; so that she had an additional weight of about five stone, or seventy pound of solids and fluids, a weight which, if any thing but her own self-indulgence in eating and drinking could have brought upon her, would have been insupportable. By this excess of corpulency, she has in a great measure deprived herself of the power of using wholesome exercise in the open air, and has thus precluded herself from the enjoyment of that pleasure and recreation, which necessarily result from the faculty of moving easily from place to place.

If

If we examine a little into the *effects* of corpulency on her constitution, we shall find them very pernicious and alarming.

The bones and joints of corpulent people remain nearly in the same state, however preposterously the other parts may be increased in size. But if Providence made the bones and joints strong enough to bear with ease the weight of ten stone, they are seldom sufficient to bear well the addition of sixty-three pound more, but sooner or later they will sink under their burden, and become weak and painful. This patient was very lame and weak in her ancles and knees. The time required to affect the joints is different in different people, according to the natural strength and soundness of the bones; on which account some will be lame much earlier in life than others, though of the same degree of corpulency. This lameness and weakness in the joints renders all motion and exercise painful and troublesome, and so contributes greatly to increase the evil.

But as the bones of adults can admit of little or no addition to their size, we must have recourse to the other parts of the body to estimate the increase of weight in corpulency; and we find that

that the chief increase of weight is in the additional quantity of blood, and of oily matter or fat which is deposited in the cellular membrane. The muscular fibres, it is agreed among anatomists, have fixed limitations both in size and number. They may, perhaps, be better filled up with the ultimate particles of matter in a state of corpulency than in a state of leanness; but this will make very little increase of bulk. Whereas the great increase of blood and fat in corpulent people, is evident to the senses. Morgagni mentions a case in which the fat on the muscles of the belly was above six inches in thickness, and it was in a proportionate quantity in other parts of the body*. The increased quantity of blood too, in such cases, is likewise very manifest. But the consequence of such an increased quantity of fat and blood must be very terrible indeed to the animal frame†.

Now if we examine the symptoms which this patient complained of, we shall find that the
cause

* Vide Morgagni de caus. & fed. morb.

† "The greatest healthy standard the body is capable of, differs from the least, as it more hastens old age: Suppose one enjoys health at *two hundred*, equally with another of *five pound* more: The excess of the latter has been observed to hasten old age five times as fast." *Quincy's Sanct. Aphor.*

cause or increase of them may evidently be attributed in great measure to her corpulent state.

"Her head often akes, and feels heavy and dizzy." These are very common effects of corpulency and fulness of blood; and whenever pain, heaviness, and giddiness of the head arise from that cause, they ought never to be neglected, but always considered in the most serious light by every one who wishes to enjoy health and life. From inattention to those symptoms, many dangerous complaints occur, such as palsy, apoplexy, epilepsy, inflammation of the brain, &c.

"Her nerves are in a very irritable and relaxed state." Corpulency and great tension of the blood-vessels generally increase irritability; and the want of bodily exercise along with confinement within doors, favors general relaxation. Hence the danger of the case is greater; for a superabundant quantity of blood will certainly be more hurtful in an irritable and relaxed, than in a firm and vigorous state of the vessels.

"She is very much stuffed in her breast, and has a bad cough." How seldom do we see a

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very

very corpulent person, who can breathe with ease and freedom? Shortness of breath and stuffing in the breast, greatly increased by motion, are almost constant attendants on excessive fatness. The vessels of the lungs are greatly over-loaded with blood, and a more frequent respiration is necessary for the circulation of it. The heart, the midriff, mediastinum, and large vessels are often loaded with an unnatural quantity of fat, which diminishes the capacity of the chest, considered with a view to the dilatation of the lungs and the admission of air into the air-vessels. Her cough too, which is a very troublesome symptom of the Asthma, is greatly increased by the same cause.

Hence, as the case proceeds, "She is often attacked suddenly with a stoppage in her breast, with wheezing and great difficulty of breathing, so that she is afraid even of instant suffocation." This is a very dreadful symptom of the Asthma, and one which is particularly frequent and fatal to corpulent people.

"Her body is much swelled with wind. Her nights are uneasy and disturbed." Corpulent people, from indulgence in eating or drinking, are very liable to be troubled with wind in the
stomach

stomach and bowels. Their sleep too is seldom natural and composed. Many very corpulent people, when asleep, breathe with so much noise and difficulty, start so violently, and have so many stoppages and interruptions of respiration, that one, not accustomed to see them in that state, would suppose that they were not sleeping, but threatened with immediate suffocation.

"She is at times subject to a nervous complaint, in which her head trembles and her mouth is drawn to one side." This is evidently a dangerous paralytic affection, arising in all probability from her corpulent state and the fulness of the vessels of the brain.

Thus we have, in a cursory manner, run through the melancholy catalogue of symptoms, which, along with too great corpulency, distressed this unhappy sufferer. Her diet, by my directions, was regulated in such manner, that it might not be reduced on a sudden too low, nor yet continued by indulgence to an excess, which might increase her disease, and soon render it fatal. Very corpulent people, who have long been in the habits of gratifying their appetite, like nothing less than to be restrained in what they eat and drink. The idea,

however, of a natural, or, as it is called, a constitutional fatness, which (we are taught to believe) comes on and is continued through life, independent of the quantity of nutriment with which the body is daily supplied, is a chimera too ridiculous to be seriously refuted; and indeed no body was ever so absurd as to suppose, that the same thing could take place in any other living creature. Yet it is readily admitted on all hands, that some people will grow fat with a moderate diet, and that others will continue lean though they seem to eat immoderately. But this difference arises from a better and more perfect digestion in the one case than in the other. Yet the matter remains equally certain, that the person, who grows very fat, takes in more nourishment than he ought to do; while the other only follows nature, and prudently endeavors, as far as he is able, to supply her daily wants. It is not the quantity that we eat and drink, but the effects of it on our bodies, which, with a view to the preservation of health, ought to be chiefly regarded. The just proportion of the ingested and egested, should be strictly preserved.—But if what we take in exceeds what passes from us by the different outlets of the body, it is manifest that we take in more than nature requires. Corpulent

A

people

people have no chance to diminish their corpulency, but by *moderating their diet*; for they are seldom able to use exercise sufficient for that purpose. At the same time *gentle exercise* of all kinds, when it can be admitted, is very advisable, and it ought to be increased, as they lose weight and become stronger and more active.

But I beg pardon for enlarging on a subject, likely to do so little good; for the reduction of excessive corpulency is to most people an Herculean labor, entered upon with great doubts and difficulties, but easily desisted from, and the evil left to remain as it was. It would however be well, if those, who are beginning to grow very fat and corpulent, would reflect a little on the fatal consequences of such a state of body, viz. the miseries, diseases, and untimely deaths to which they are liable to be soon exposed. By this means they might be persuaded to moderate their diet; or, if that be impossible, to use exercise in proportion to it, while they are able, that the size and weight of the body may be continued at a proper and healthful standard. *

Before

* Dr. Cullen, in his public Lectures on the Practice of Physic, makes many excellent observations on the removal of corpulency, which he very justly styles a disease, under the title of *Polyfarcia*.

Before I conclude these remarks, I must not forget to mention that Mrs. ——— had an inflammation in her eyes, which was cured by the common applications; and as my own eyes have been long weak in consequence of inflammation, I may be allowed to add, that without great temperance in diet, I never found any external applications which could procure me any lasting relief. If the vessels of the eyes and eye-lids are relaxed by long previous inflammations, a superabundance of blood in the general habit will always have the greatest effect on the weakest part; and, surely, our sight is a blessing of so valuable a nature, that if temperance in eating and drinking will preserve it, we cannot think it too dearly purchased. Moderate exercise too, properly continued, in which there is no violence or straining, will, if the weather is not too cold or windy, be found very serviceable in the same complaint.

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C A S E IX.

*The Convulsive Asthma complicated with the Jaundice,
cured by the Flowers of Zinc.*

MR. —, aged 32, January 3, 1780, has been subject to an Asthma at times for near two years, along with flatulency, distension and pain in his stomach, a bad cough and little or no expectoration. His asthmatic fits will frequently come on in a moment, so that he can neither walk nor speak. His breathing at present is very laborious, but it is the worst about three or four o'clock in the afternoon, and continues severe till two or three in the morning, after which time he generally becomes easier, and rests tolerably well.

He is subject likewise to a pain in his right side which extends across his stomach, and he has at present a very bad jaundice. His face and eyes are very yellow, his stools white, urine thick and high-colored. He has been accustomed to high living, and, for many years past, has been very free in the use of strong liquors. He has had the jaundice above three months. His constitution is weak and impoverished,
spirits

spirits dejected, pulse low, body bound, appetite bad, and he is frequently troubled with sickness.

R. *Infusi amari simplicis uncias duas cum semisse,*
Aquæ Cort. aurant. spirit. semunciam,
Salis diuretici scrupulos duos.
Fiat haustus, ter die sumendus.

R. *Saponis duri semunciam,*
Lenitivi Electarii drachmas sex,
Tartari solubilis drachmas duas,
Rhabarbari Pulveris drachmam unam,
Syrupi Rosarum solutivi q. f.
Fiat Electarium, cujus capiat drachmam unam
mane & vespere, donec alvus responderit, & repe-
tatur eadem dosis pro re nata.

The 8th. He still continues to be troubled at times with sickness and reaching, the pain in the region of his stomach is easier, his body is open, his stools are of a more natural color, and the yellowness of his face is somewhat abated. His asthmatical complaints are nearly as usual.

Sumat emeticum vespere.

Continuetur electarium; & repetatur ut antea
haustus amarus, addendo

Florum Zinci grana octo.

The

The 12th and 14th. The emetic answered well. He was not sick with the draught. The yellowness of his face and eyes is less; his stools are more natural and of a yellower color; pains easier; appetite better; body loose; cough, difficulty of breathing, and other asthmatical symptoms rather abated.

The 19th. His cough and difficulty of breathing still continue to grow better, the symptoms of the jaundice seem gradually to diminish, and he has little or no pain in his side and breast. His expectoration is easier and his sleep less disturbed.

Repetatur electarium; & continuetur haustus amarus, sed constent singulae doses ex Florum Zinci granis duodecim.

The 24th. The symptoms of the jaundice are almost removed, stools natural, urine clearer, appetite good. He is not sick with his medicines; his breathing is easier; and he gets up a little phlegm with his cough.

The 29th. He finds himself materially better in his cough and difficulty of breathing, and can bear to use exercise with much more ease.

The pain in his right side is entirely gone, and he has no symptoms of his jaundice remaining.

February 4th and 8th. He has had no return of the Asthma, and continues free from the jaundice.

After the observations already made on the preceding cases, the indications and method of cure in this will require little or no comment. The complication of the Asthma and Jaundice is not unfrequent. I have seen several cases of the same kind. This Gentleman had been accustomed to eat high-seasoned meats, and to drink freely, which method of living induces plethora and over-distension of the blood-vessels, and consequently want of tone and internal obstructions and inflammations in the different viscera, and in none more readily than in the lungs and liver.

As a further proof of what is here asserted, I shall beg leave briefly to relate the case of a patient, whom I had some years ago in the York County-Hospital, gardener to Sir Joseph Pennington, who had a most dreadful complication of a pulmonary consumption and jaundice,

in

in which the Asthma occurred as a symptom. The whole right side of the chest was very much swelled and enlarged, as was evident to the eye. His cough was troublesome; his breathing at times suddenly and dreadfully laborious; and he expectorated a yellow bitter fætid matter, in which there appeared to be a mixture of bile, pus, and phlegm. He complained likewise of swelling and hardness in the abdomen, and of severe pains in his breast, stomach, and bowels, with constant vomitings. His pulse was extremely weak, and he had no appetite. His disorder had been preceded by a fever nine months before. He could lie no way but on his right side, and then was obliged to have his head and breast raised high with pillows. Extreme debility. A hectic fever, with morning sweats. No rest at nights. Great flatulency and dry brown stools. He lingered on a few weeks, and then was happily released from his unspeakable miseries.

On opening his body, his bowels were mortified in several places. His liver was of a pale color, and forced down three inches lower than natural. The gall-bladder was distended to twice its common size, and there were three gall-stones contained within it, but

no passage remained by the ductus communis into the duodenum. The right lobe of his lungs was entirely consumed except a very small portion little bigger than a hen's egg; and the right side of the chest contained seven quarts of a yellow bilious matter, similar to what he usually expectorated. I then examined the midriff, and found on the right side of it a large opening into the right lobe of the liver. A little more to the left, and near to the mediastinum, but still within the right cavity of the chest, there was another opening through the midriff, which led into the small lobe of the liver. On cutting into the lobes of the liver, there were two very large ulcers, which had nearly consumed the whole substance of that gland. The left lobe of the lungs was not much diseased, and the heart was sound.

During my attendance at St. Thomas's Hospital in London, there was a patient in a jaundice, pulmonary consumption, and symptomatic Asthma, who expectorated purulent matter mixed with bile, leaving no doubt, from its color and taste, of a communication between the lungs and liver through the diaphragm. This man also died, but I do not remember that his body was opened.

Ulcers

Ulcers in the lungs and liver frequently arise at first from obstructions and inflammations, which, perhaps, early and plentiful bleedings might have cured. But the lower class of people are often patient under their complaints, until they have got a foundation which nothing can remove. There are many cases of jaundice, which begin with symptoms of inflammation in the liver, in which repeated bleedings, according to the urgency of the symptoms, are of the greatest service. In the case of Mr. — there were gall-stones in the gall-bladder, which, by creating obstructions, might probably be one principal cause of his most complicated malady. The inflammation of the lungs and liver was communicated to the diaphragm, and induced adhesions and ulcerations. In consequence of this communication between the thorax and abdomen, the bilious purulent matter of the liver was mixed with the mucous purulent matter of the lungs, and caused that mixed bitter foetid discharge by expectoration, which we have before mentioned. It was evident, from the symptoms of the disease, as well as from the dissection, that there was no passage from the ulcers of the liver by the ductus communis into the duodenum, otherwise there would have been a drain for the matter downwards, which was not the case.

PART II.

CASES of ASTHMA,

IN WHICH THE

FLOWERS of ZINC

Were employed with success from the first of
my Attendance.

CASE X.

*The Convulsive Asthma, complicated with the Hu-
moral, cured by the Flowers of Zinc.*

WILLIAM LAWSON, a brewer by
trade, aged 33, admitted at the York
County-Hospital on the 29th of January, 1781,
has drunk hard, and been frequently exposed
to cold; to both which causes he attributes his
present asthmatical complaint, which he has
had for three years past, but says it is worse
this

this winter than ever it was before. The fits of his Asthma sometimes last for three days, sometimes for a single night, and sometimes for only two or three hours; but at all times the difficulty of breathing in the fit is so violent that he cannot bear to lie down. His face is high-colored, and his habit of body inclining to fulness; his pulse is strong and rather quick; his expectoration difficult and scanty; his left eye is considerably inflamed; and his feet and ancles are swelled and painful, which last symptom he has had for some time past. He has taken lately by my direction some aloetic pills, which have kept his body open, and he thinks that they have been of service to him.

Mittatur sanguis ad uncias duodecim,

*Samat Florum vet Calcis Zinci grana decem in
conserva rosarum drachma una;*

Mistura salina uncias duas ter die;

Pilularum Ruffi tres vel quatuor pro re nata;

& Haustum anodynum hora decubitus.

February 1. He finds himself somewhat better to-day. The first and second night since the report of the 29th, he was so very bad in his Asthma, that he was forced to rise at one o'clock, and sit up all night. The third night he was somewhat easier, and lay in bed till
near

near six o'clock. He coughs less and expectorates freely. His blood is not sily; and, since he began with the pil. Rust, he has generally one or two stools a day. He says that he finds relief at night from his drops, and he is not sick with his bolus.

Repetantur remedia; & continuetur bolus addendo Florum Zinci grana quinque.

Sumat cras mane Mist. Purg. uncias quatuor.

The 5th. The stuffing in his breast and difficulty of breathing are better. He wakes now at one o'clock, and has his fit, which lasts only for an hour, and he can bear to lie down in bed all the time. His cough is easier and looser, and he spits freely a whitish, yellowish, well-digested phlegm, of an uniform color and consistence. His physic answered well, and gave him several stools. He has no sickness with his boluses, and his appetite is much improved. His left eye still continues to be inflamed; but the pain and swelling of his feet and ancles are easier.

Repetantur remedia; & continuetur bolus, sed constant singulae doses ex Florum Zinci granis viginti.

Sumat haustum anodynum cum tinctura thebaicae guttis triginta.

Collyrium commune sepe in diem utendum.

The

The 8th. He has easy nights and rests well, little or no cough, a free expectoration, and a good appetite. He has two or three stools every day. His eye is much better, and the eye-water did not make it smart.

The 12th. He has had no return of his asthmatical complaint, and his eye is well.

The 15th. He has no difficulty of breathing, and his cough is almost entirely gone. His appetite is good; his pulse is natural; he sleeps well; has no rheumatic pains in his feet and ancles; and finds himself much stronger.—Let him be dismissed.

William Lawson was a brewer, which is a very unwholesome employment. I have had many patients, following that business, who were afflicted with severe complaints in their lungs, either asthmatical, consumptive, or both.—Brewers are exposed to great heats and colds, nocturnal watchings, and hard drinking, all which we have fully shewn to be frequent and powerful causes of the asthma and pulmonary consumption. The convulsive asthma in this case was complicated with the humoral; for his

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cough

cough was violent, with a foul copious expectoration. A laudable expectoration generally relieves in these cases, but any expectoration, however laudable, denotes, if in large quantity, a severe complaint. The pain and swelling of his legs appeared to be rheumatic.

As he was plethoric, blood-letting and laxatives were advised, and indeed both his pulse and general habit of body seemed to indicate them. He then took the Flowers of Zinc, the saline mixture, and tinctura thebaica. As I had found the Flowers of Zinc evidently useful in the Asthma, and had in many instances seen them succeed when other medicines had failed, I prescribed them immediately in this case, without having tried other remedies before them. The Flowers of Zinc are by no means to be classed among powerful heating stimulants, and therefore I had no fear of using them after bleeding and laxatives, though the patient was rather of a full habit.

The matter expectorated and accurately described by this patient is different from the common appearances of phlegm. He called it "a whitish yellowish rotten stuff," which had a disagreeable faint taste and smell, and was of an uniform
color

color and consistence. I saw some of it, and I have seen a similar kind of matter spit up by several Asthmatics. It is not pus, but a yellowish uniform well-digested mucus. Indeed, phlegm, with the same appearance, is sometimes expectorated in a common catarrh, where there has not been the least foundation; from the attendant symptoms and the sequel of the disease, to suspect even any the smallest ulcerations in the lungs. In consumptive cases with tubercles and ulcerations of the lungs, the matter spit up is generally of a mixt nature and variegated color, partly opaque and partly transparent, consisting of pus and mucus, more or less intimately blended together, and very rarely (if ever in the beginning of those complaints) puts on an uniform appearance in color and consistence. By a careful examination, the experienced practitioner can readily distinguish in general the clearer, more transparent, and more viscid particles of phlegm, from the yellower, less transparent, and less coherent particles of purulent matter, and a separation of the two may be made in many cases, by the help of a small probe or any other fit instrument.

William Lawson had been ill three years, the season of the year was against him, and his disorder was very violent. He begun with ten grains of the Flowers of Zinc, and gradually increased the dose to twenty grains three times a day, and he took his drops in the last dose of his mixture. He was admitted at the Hospital on the 29th of January, and he was dismissed cured on the 15th of February.

C A S E XI.

The Convulsive Asthma, complicated with the Humoral, cured by the Flowers of Zinc.

ELIZABETH STEVENSON, aged 62, March 13, 1776, of a pale ematiated habit, has been subject to an Asthma from her infancy of the convulsive kind, complicated with the humoral. The fits return frequently, and are very severe, particularly in thick foggy weather. Her spirits are low, body bound, pulse weak, appetite but very indifferent, and she is subject to the piles. She has used at different times a variety of medicines, some of which she thought gave her a little relief. She has had no appearance of the menses for many years past.

R. Con-

R. *Confectionis cardiacæ drachmam dimidiam,*
Conservæ Cynosbati scrupulum unum,
Castorei pulveris,
Florum Zinci, utriusque, grana quinque.
Syrupo balsamico fiat bolus. Sumat unum bis die,
Et superbibat julepi cardiaci uncias duas.

R. *Lenitivi Electarii unciam unam,*
Florum Sulphuris semiunciam,
Tartari Solubilis drachmas duas,
Rhei Pulveris, drachmam unam,
Syrupi Balsamici q. s.
Fiat Electarium, cujus capiat mane pro re nata
cochlearium unum parvum.

The 18th. The electuary procured her one stool, and the bolus agrees well with her stomach; but her breathing continues very laborious, attended with much wheezing.

Repetatur electarium, etiamque bolus, addendo
Florum Zinci grana tria.

The 25th. Her spirits are still low, and she has a bad cough. Foggy weather and the smoke of the city encrease the violence of her asthmatic fits, but a dry clear state of the air renders them milder.

The

The 29th. She finds herself considerably better.

April 3. She continues to recover. The boluses sit easy on her stomach, and the electuary keeps her body regular.

The 6th. She feels herself very well this morning, her asthma and cough are very much relieved.

Repetatur electarium; & continuetur bolus, sed constant singulae doses ex Florum Zinci granis decem.

The 12th. The medicines continue to agree with her, and she finds no sickness after taking them. Her appetite is improved; she sleeps well, and feels herself stronger every day.

The 19th. She has no cough; but at times is yet troubled with a slight difficulty of breathing.

The 26th. She has no complaint.

CASE

C A S E XII.

The Convulsive Asthma, complicated with the Humoral Asthma, general Weakness, Relaxation of the Stomach and bowels, Indigestion, dropfical Swellings and Rheumatism, cured by the Flowers of Zinc, Purgatives, gentle Labor, &c.

MARY STEVENSON, aged 23, April 1, complains of a pain in her breast, a violent cough, and difficulty of breathing, which come on very suddenly both in the day and in the night, and continue for several hours at a time. Any quick motion will frequently induce a fit of her asthmatical complaint, but it frequently attacks when she is using no exercise at all, attended with a swelling of her stomach and palpitation of her heart.

She is subject to dropfical swellings of her legs, and sometimes she has a like puffy swelling universally over her whole body, and at those times she can hardly get her breath. She is of a low stature and a full gross phlegmatic habit, but her face is rather pale, and her flesh relaxed and unwholesome. She is not regular in her menses; for sometimes they return once in three weeks,

weeks, and sometimes they do not appear for two or three months. Her stomach often swells violently, and she has frequent fainting fits. She got cold when her menses were upon her about two years ago, which first brought on her shortness of breath. About that time, likewise, she first began to be loaded with unwholesome fat. She is frequently troubled with dizziness, sickness, and a rising of insipid water from her stomach, which the common people in this part of the country call black-water, and in Edinburgh waterbrash. After these fits of dizziness and sickness, she sometimes feels a coldness, and then immediately breaks out into a sweat. Her skin often prickles and itches violently. She is subject to severe pains in her legs, stomach, and bowels. Her pulse is low and not quick, expectoration difficult, tongue clean, skin cool, body regular.

*Florum Zinci grana octo in conservæ rosarum
drachma una bis die.*

Misturæ mucilaginosæ uncia 3 dimidia ter die.

*Haustus senæ purgans c pulveris jalapii granis
octo cras mane.*

The 5th. She still complains of a pain in her breast, a troublesome cough and great shortness of breath, with general dropsical swellings

ings. She has a very troublesome itching in her skin. Other symptoms are nearly as before. The physic answered well; and the bolus did not make her sick.

Mittatur sanguis ad uncias octo; & repetantur remedia, sed augeatur dosi Florum Zinci ad grana duodecim.

The 10th. Her asthmatic fits do not return so frequently, nor are they so long or violent as they were. She feels no sickness from her medicines. Her appetite is better, and the black-water is less troublesome. Her legs and whole body still swell at times, but in a less degree, and she finds herself growing stronger.

Haustus senæ purgans cras sumatur.

The 13th. She continues to recover. Her appetite is good. Expectoration free. The pains in her legs are much better, but her breast feels sore, and her stomach is both sore and swelled. She says that her physic always relieves her.

The 18th. Her stomach swells much, and she often has, as usual, a violent palpitation of her heart. In other respects she continues to recover.

Repetatur bolus, mistura, & haustus purgans.

The 22d. She is weak and languid to-day.
The purging physic relieves her materially.

Haustus senæ purgans cras.

The 26th. She has her menses at present,
and continues better.

May 3. She says that the bolus makes her
sick. She has still some returns of her diffi-
culty of breathing, but they are very trifling.
The general dropfical swellings of her legs
and whole body are almost entirely removed.

Haustus senæ purgans cras.

*Sumat pilulas Florum Zinci duas mane & vespere,
& superbibat julepi menthæ uncias duas.*

The 6th. She is better, and makes no com-
plaint of sickness; but has a pain in her thighs.

Sumat pilulas tres mane & vespere.

The 10th. She recovers fast, and says she
finds much relief from the pills. Her short-
ness of breath and pain in her thighs are much
better. Her sick fits do not come on near so
frequently, her stomach is stronger, and her
dropfical swellings are entirely gone.

The

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The 16th and 24th. She has had no return of her asthmatical complaint except once when she walked quick. Her strength encreases daily. Let her go into the country.

R. *Aquæ Fontanæ uncias quatuor,*

Mucilaginis Gummi Arabici.

Tinct. Cort. Peruv. utriusque unciam unam.

Misce. Dosis uncia duæ ter die.

The 31st. She has got a little cold since she left York. Her tongue and throat are sore, which disturbs her rest, and she is costive. The country agrees very well with her, and for some days past she has been gathering weeds in the fields. She has walked eight miles to-day, and returns home to-morrow. She does not take milk because it stuffs her.

Repetatur mistura corticis & sumantur pilule Ruffi tres pro re nata hora somni.

June 7. She is still in the country, and has walked eight miles to-day. Has had no return of her Asthma, but complains of a little fresh cold attended with a slight cough, sore mouth and spitting. She has lost a good deal of that unwholesome fat with which she was burdened.

D. d. 2 The

The 24th. She has no complaint, except a little roughness in her throat, with a few small pimples in her mouth. She is strong and well in all other respects; her appetite is perfectly restored; her complexion is clearer and more healthful; and she is much smaller in her person, but stronger and more active.

July 8. No complaint of any kind.

This Asthma is complicated with a high degree of chronic or general weakness, along with great relaxation of the stomach, and universal puffy dropical swellings. Her habit of body was very gross and phlegmatic, and she had a pasty unwholesome look, with great languor and sluggishness of constitution, all which were very unfavorable circumstances. She attributed the rise of her complaint to cold when her menses were present, which is a very frequent cause of diseases among women. Particular caution is required at that time, for their constitutions are then more readily acted upon by cold. Afterwards, when her illness confined her, she was, in consequence of her relaxed fibre, not only troubled with general cedematous or dropical swellings, but also with
an

an unwholesome fatness, which of itself would certainly tend to encrease her difficulty of breathing and asthmatical complaints. Thus she was in a fair way of rendering her disorder worse, if not incurable.

When she first came to me, as her pulse was low and her habit relaxed, I wished to avoid bleeding, and ordered the Flowers of Zinc as a tonic and antispasmodic, along with a dose of physic and a mucilaginous decoction. The second time I saw her, her cough and difficulty of breathing, with a rheumatic pain in her side and legs, were still very troublesome, and therefore bleeding, notwithstanding the relaxed state of her constitution, was advised. Indeed it is a fact well confirmed by experience, that we are sometimes under the necessity of bleeding in severe attacks of the Asthma, when even the weakness of the patient is very great. This operation however, in order to render it successful, must in such dubious cases be performed with great caution and judgment, otherwise much mischief may certainly ensue from it.

Gentle purgatives, thro' the whole of this case, were of great use; and indeed from the general appearance of the patient and the nature

ture of her constitution, it was highly probable they would be so. Her habit was gross, and she sometimes eat more than she could digest, which would of course swell and disorder her stomach and bowels. Purgatives, therefore, affording immediate temporary relief to the first passages, and unloading the blood vessels by inducing a discharge of serous fluids, were evidently indicated. When her menses were upon her she did not take her purgative; but I did not judge it necessary to intermit the other remedies, as they would rather favor than check that natural evacuation.

The Flowers of Zinc were prescribed at the beginning of her attendance, and continued till the asthmatic fits were removed. They were first given in the form of a bolus, but when she grew tired of that, they were prescribed in pills, beginning with a smaller dose and gradually increasing it. The remedy then agreed very well with her, and she gladly acknowledged that she continued to receive benefit from it. Her diet in the mean-time consisted chiefly of bread, water-gruel, light puddings, a little fresh meat now and then, and such like mild nourishing things.

Afterwards

Afterwards the tincture of bark and the pil. Rufi, along with country air and exercise, were recommended to compleat the cure. As she grew better, she was obliged to work in the fields for a livelihood, and she had eight miles to walk whenever she attended on me at my Dispensary. Eight miles were at first more than in strict propriety she ought to have walked; but necessity has no law; and had I begun to raise objections, she might, thro' fear of over-fatiguing herself, have desisted from her attendance, and so have lost the opportunity of being cured.

This example, I hope, may be useful to others; for she certainly received very great benefit from walking and gentle labor. Her appetite and digestion were restored; she looked clear and well in the face; lost all her unwholesome fat; and with regard to activity and bodily strength, became quite a new creature. Such examples, as this, are rare; for the natural sluggishness of constitution in these cases forbids exercise, and when people are in easy circumstances, trouble of all things is what they most dislike. This poor woman was obliged to work for her bread; and therefore my advice, concerning exercise and gentle labor,

were

were followed with steadiness and alacrity. Such relaxed watery exuberant constitutions as hers, will always receive very great benefit from following her example, both in using exercise and in avoiding indulgences.

C A S E XIII.

The Convulsive Asthma, complicated with Chronic Weakness, cured by the Flowers of Zinc.

ALICE WILSON, aged 53, September 13, 1782, has an Asthma of the nervous kind. It attacks her at four o'clock in the morning with great violence, so that, not being able to lie down, she is obliged to sit up in bed. The fit lasts three or four hours. Her complaint has been growing worse ever since last May, and has constantly returned every night. She gets her livelihood by washing, and consequently has often been exposed to great heats and colds. She has had no appearance of her menses for seven years past, and when they were leaving her, she was very ill for four years, troubled with frequent vomitings and great weakness, but after a fever she gradually recovered her health and strength. Her stomach

mach is often very sore, particularly in an afternoon, and she frequently spits up a bitter froth in which there is a mixture of bile. She is at times seized with sickness and vomiting. She complains of flatulency and a constant working in her bowels at night when she wakes, which symptoms she has had many months; and also of great tightness over her breast both before and during her asthmatic fits. Her body is bound. Expectoration difficult. Skin cool. Pulse moderate. Nights very restless and disturbed.

*Capiat bis die bolum ex Florum Zinci granis sex
& conservæ cynosbati drachma una; & superbibat
julepi menthæ uncias duas.*

The 20th. She is rather easier. Had a little sickness from the bolus for two or three of the first doses, but is not sick with it now.

*Repetantur remedia; necnon sumatur emeticum
hora septima vespertina.*

October 3d. The vomit operated well, and her other medicines sit easy on her stomach. She finds herself considerably better both in her cough, expectoration, and difficulty of breathing. Her asthmatic fits are but trifling at

E e present,

present, and she sleeps well. The forenefs of her ftomach is greatly diminished, and she feldom fpits up any bitter froth.

The 12th. Her cough is better, and ſhe can breathe much more eaſily. Her bolus creates little or no ſicknefs. The tightnefs and ſtricture acrofs her ftomach is almoſt gone. She has good nights, and is very eaſy when ſhe wakes. The flatulency and conſtant working in her bowels at nights is diminished.

The 18th. She has had a return of her Aſthma for ſeveral nights, but with much leſs violence than before. Her cough continues better, her expectoration is freer, and ſhe has no vomiting. She reſts in the night tolerably well.

The 25th. She continues much better; has little or no wheezing in the night; and breathes freely without any return of her aſthmatic fits.

November 1ſt. She has no complaint.

This

This woman's case affords another striking example of the good effects of the Flowers of Zinc. Her Asthma too was complicated with a great degree of general weakness, and relaxation. The soreness of her stomach, vomitings and rising of bitter froth, with flatulency and frequent working in her bowels, were very troublesome symptoms. The tonic and antispasmodic effects of the Zinc proved useful in the removal of those complaints, as well as of the Asthma. It is somewhat singular, that when the menses had left her, she continued ill for the space of four years, and after a fever recovered her health and strength again. It is difficult to account for this fact; but there are many of a similar nature, sufficient to support and confirm the truth of it; for we frequently see valetudinarians become stronger and more healthful after a fever.

CASE XIV.

The Convulsive Asthma, complicated with the Humoral Asthma, Spitting of Blood, Bleeding of the nose, Rheumatism, and Weakness of the stomach, cured by the Flowers of Zinc.

I Was desired to visit at his house in the country Mr. —, aged 47, April 12, 1783, who is violently afflicted with an Asthma attended with a severe cough and stuffing in his breast. He is commonly attacked in the day-time with three or four fits, in which his difficulty of breathing is on a sudden so violent as almost to threaten suffocation. He has likewise several fits in the night, and then wakes from his sleep in so distressful a situation, as if unable to recover his breath. These complaints are followed by a severe cough, from which he finds ease when he spits up a little phlegm of a grayish or bluish cast. His difficulty of breathing is always the greatest when he is the least able to cough, but sometimes coughing gives him a violent pain in his head. He has been subject to this asthmatical disorder for several years past, and has always found great difficulty in using exercise of any kind. About eight weeks ago he frequently spit blood in considerable quantities attended with a fit of coughing. His constitution is rather full and tolerably

tolerably good; and he is subject at times to a bleeding at his nose. He complains of thirst, but has no appetite for food. His stools are natural, but he is much troubled with wind in his stomach, which at times makes it swell violently. His pulse is small, and rather hard. He is low-spirited, has a dizziness in his head, and a frequent restlessness and uneasiness in his limbs, with rheumatic pains in his side, hips, shoulders, &c. moving from one place to another.

Fiat venesectione ad uncias octo.

*Sumat haustus senæ purgantis uncias quatuor cras mane. **

Capiat ter die haustum ex julepi e camphora uncia et dimidia; nec non bolum bis die ex Florum Zinci granis octo.

On the 16th I saw him again, and took the following report. His blood is rather sily, the physic operated well, he is not sick with his bolus, and finds himself somewhat easier. He is still very much stuffed in his breast, and has a troublesome cough; but the attacks of sudden difficulty of breathing, which he calls his nervous Asthma, have neither been so frequent
nor

* This purging draught is the same as the one prescribed p. 173, with this difference only, that the tartarum solubile is used instead of the sal de Rochelle.

nor severe. He is still thirsty and has no appetite. His pulse is small, but neither hard nor frequent, and his rheumatic pains are much as usual.

Repetantur remedia.

On the 20th I paid him another visit in the country, and had the satisfaction of finding him materially better. His asthmatic fits were less frequent and less severe, and his cough was not so violent and straining as it had been. He complained still of stuffing in his breast, thirst, want of appetite, and pains in his joints. His pulse was softer and not quick. His stomach was less loaded and less swelled. The dizziness in his head and lowness of spirits were somewhat better. The physic answered well. The bolus sat easy on his stomach, but he was sick with his draught.

*Repetatur bolus, & sumantur ter quaterve in die decocti maciluginosi unciae duo. **

In

- * R. Radicis Althææ incise unciam unam cum semisse,
- Gummi Arabici drachmas duas,
- Aquæ fontanæ libram unam,
- Coque ad Colaturæ uncias sex, & adde
- Nitri puri drachmam unam,
- Syrupi balsamici,
- Syrupi limonum, utriusque, drachmas quinque,
- Aceti distillati unciam unam vel quantum satis ad gratam aciditatem.

In a few days after the last report I received a letter from him, informing me that his asthmatic fits had entirely left him, and that his cough and stuffing in his breast were much better and attended with a free expectoration. His spirits were good, his digestion stronger, his pains much less troublesome, and he had had no return of his spitting of blood. His medicines agreed well with his stomach.

On the 4th of May I received another letter from him, by which I learnt that he continued to recover, but that his cough had not entirely left him, and now and then he had a slight return of his asthmatic fits. He had begun, by my desire, to ride out on horseback every day when the weather was favorable, and found much benefit from it.—In little more than a fortnight after the receipt of my last letter, I saw him in York perfectly well and free from complaint. He then told me of his own accord, that he had continued the use of the boluses to the very last, as he had found great relief from them.

The case of this Gentleman affords an accurate history of that species of the convulsive
Asthma,

Asthma, in which the fits are short, but frequent, recurring several times in twenty-four hours. The humoral Asthma is here complicated with the convulsive, along with a considerable degree of rheumatism—a complication which is not unfrequent. But in the case of Mr. ——— we find likewise that he is subject to a spitting of blood and a bleeding at his nose; partly from an obstructed circulation through the lungs, and partly from too much blood in the vessels. It is highly probable from the history of the disease, that this patient had tubercles in his lungs. *

When his difficulty of breathing was the worst, he was scarce able to cough, but as the fit abated, his cough returned, and he found ease when he could expectorate a little phlegm. This however he, like other asthmatics, could not always accomplish; for he would often cough violently for a considerable time, and at last be unable to spit up any thing at all. Such coughing fits as these harrassed him much. Sometimes after two or three severe fits of coughing he would expectorate a little phlegm of a grayish or bluish cast, which afforded evident

* Vide page 116, where the symptoms of tubercles are enumerated.

evident relief. Some Physicians are of opinion, that the phlegm, which is spit up of that color, comes from mucous glands in the bronchia, which are nearly of the same color. However that may be, I am fully convinced that it often gives an irritation to the lungs and provokes a cough, when it is not compleatly in the course of the air thro' the air-vessels; for during the time of a fit of coughing, I have seen asthmatics, when the spasm of the lungs was not present, take a clear and tolerably full inspiration, without the least sound or rattling of phlegm in the air-vessels, and yet the irritation exciting the cough, has continued till, by further repetitions of the cough, a little dark-colored or bluish phlegm has gradually got into the course of the air in the air-vessels, occasioning a kind of rattling sound, and at last has come easily up mixt with a small quantity of common white phlegm. *

This fact has frequently fallen under my own observation, and many asthmatics have

F f

confirmed

* In this case it appears as if the phlegm was either lodged partly at the orifice of a mucous duct, and partly in a small air-vessel; or else, collected more together, blocked up a small air-vessel, and part of it hung into another of a larger size, and produced an irritation there, till by coughing or hewing the phlegm was forced into the larger air-vessel and then came easily up, or else flew out of the patient's mouth to some distance.

confirmed it. It is worth attention, for probably it may be hereafter found, that some species of the Asthma may originate from a disease in those mucous glands of the bronchia which secrete that bluish or grey-colored mucus, and be afterwards communicated more or less to the substance of the lungs themselves. Nothing but frequent dissections of dead bodies can clear up this point, nor indeed many others in the science of medicine, which are still involved in darkness and uncertainty. And it is to be hoped, that in this improving age the prejudices of mankind, against so useful and necessary a practice as that of examining the bodies of the dead, have at length subsided and given way to sound sense and public utility. By withholding no opportunity of advancement of medical knowledge from the industrious part of medical men, mankind will best consult the good of themselves and of their posterity. By this means, the ignorant will be instructed; the rash checked in their bold career; the timid convinced of the danger of timidity; the careless, through conscience, become active and industrious; and the most sensible confirmed in what they already knew, and daily add great and solid improvements to the healing art. And how often, alas, does it happen thro' the

the great uncertainty of human life, that, while we are afflicted with one disease in its infancy, another in a different part and of a different nature, puts a period to our lives: Dissections in such cases would not only shew the effects of the fatal disease, but likewise what visible changes, however small, were then made by the former which was just beginning. Thus the minutiae of medical knowledge would be illustrated, and that part of disorders better understood, which at first admits of the greatest relief, but afterwards lays the sure and solid foundation of destruction.

The medical practice, in the above case is easily explained. Bleeding and laxatives were ordered to obviate plethora, and along with them was enjoined a spare diet, which is of great consequence. Animal food was not totally forbidden, because this Gentleman's stomach was weak, but a very moderate portion of it only was admitted, and the rest of his food consisted of the prudent use of milk and vegetables. The whole of his diet, taken together, was such, as evidently tended to diminish the fulness of the vessels. Exercise at first could not be used, but afterwards riding was of great service to him. The sickness which he complained of from his

medicines arose evidently from the camphor julep; for, by omitting that, the sickness was removed, although he still continued as before the Zinc bolus.

C A S E XV.

The Convulsive Asthma, following the Hooping Cough, cured by the Flowers of Zinc.

MAfter *J. B.*—, three years and ten months old, September 22, of a relaxed phlegmatic habit, inclining to fatness, labors at present under a violent difficulty of breathing, attended with a constant wheezing, a short cough, and a considerable discharge of phlegm from the lungs, which evidently rises into his throat, and is afterwards swallowed. Sometimes the difficulty of breathing comes on in a moment, either during exercise or after sleep, and is so severe as to threaten suffocation. In this alarming state, he continues for an hour, and sometimes longer. He has generally five or six fits of his Asthma in twenty-four hours. He has labored under his present complaint for above four months. He had the hooping cough about a year ago, but has always been subject to a cough and stuffing in his breast, with
now

now and then violent fits of his Asthma. His pulse is quick and not weak, and he sleeps tolerably well, except when his cough and difficulty of breathing disturb him. The longer he sleeps at once, the worse he is when he wakes. His body is rather bound, skin cool, tongue clean, appetite indifferent, and he has no thirst. About a week ago he was bled with three leeches.

R. *Florum Zinci grana duo,*

Gummi Arabici grana tres.

Misce, fiat pulvis, ter die sumendus, ex misturæ sequentis uncia dimidia.

R. *Emulsionis communis uncias duas cum semisse,*

Spiritus Mindereri unciam unam,

Aquæ cinnamomi spirituosæ unciam dimidiam.

Syrupi balsamici sesquidrachmam.

Capiat, ex quovis vehiculo, mannæ optimæ unciam dimidiam pro re nata, quando alvus astricta sit.

Hirudines tres cruribus applicentur.

The 28th. He is heavy and feverish in an evening. His cough and difficulty of breathing are somewhat better. The leeches bled freely, the manna answered well, and his powder agrees with him.

October

October 6th. His cough is rather encreased, particularly in a morning, at which time he gets up a little phlegm; but his difficulty of breathing and stuffing in his breast are much better. His body is open and he is livelier; he has good nights and sleeps more composedly; he has a better appetite for food; is less feverish in an afternoon, and can walk stronger.

The 14th. His body is regular with the occasional use of the manna. His cough and difficulty of breathing are much better; but he is rather more feverish in an afternoon than he was, and his appetite is not so good.

Repetantur remedia, sed augeatur dosis Florum Zinci ad grana tres.

The 22d. He has no returns of his asthmatical complaint, and his cough is but very trifling. He looks much better in the face, is stronger and more lively; has good nights and breathes well. His appetite is much improved; but he is bound in his body.

*Sumat cras mane haustus senæ pro infantibus uncias duas. **

The

* The following is the prescription, to which, when necessary, two scruples or a dram of the tinctura jalapii may be occasionally added;

R. Infusi

The 27th. The physic answered well and he is free from complaint, except some return of pain in his breast, similar to that which preceded the last violent attack of his asthmatic disorder.

Cruribus applicentur hirudines quatuor.

*Repetantur cras mane haustus senæ pro infantibus
uncia duo,*

November 4th. He has no pain in his breast, but complains of a little pain in his right knee. His breathing is quite natural, and the physic, which he took on the 28th, gave him four stools.

The 9th. He has no returns of his Asthma, his cough has entirely left him, and he has no pain either in his breast or limbs.

This case affords a striking example of the Asthma in a very young child. As the paleness of his face and his gross relaxed phlegmatic constitution evidently denoted, he had been
much

R. Infusi senæ communis sesquiunciam,
Mannæ optimæ unciam dimidiam,
Amygdalas dulces tres,
Tincturæ senæ drachmas duas, M. S. A.

much confined within doors, and prevented from using that exercise in the open air, which is absolutely requisite for the health of children. Too gross a diet and too much heat had likewise contributed in this case to encrease the malady. A common proportion of food even without necessary exercise, constitutes gross feeding; and when children are confined to the house, it is difficult to keep them from being too near the fire. When asleep too in the day-time, his mother often laid the full quantity of bed-clothes upon him, along with all his wearing apparel, which heated him immoderately, and was very pernicious.

The whooping cough, which he had had about a year ago, and which in many cases proves a long and obstinate disease, contributed much towards rendering his Asthma more violent and dangerous. Sydenham has called the whooping cough, *pene insuperabile malum*, an expression, which, in all probability, has done mischief in the world, by inducing both parents and practitioners of medicine to consider the disorder as incurable, and therefore to neglect it. Tho' medicine cannot hastily remove it, I have no doubt, from the successful practice of others, and from what I have seen myself, that
much

much may be done towards shortening its duration, mitigating the violence of its symptoms, and preventing pulmonary consumptions and other dreadful consequences. In the present case, the hooping cough had been neglected, which was a very unfortunate circumstance, and might, in many instances, have proved fatal; but this child had naturally a wide chest, which without doubt contributed greatly towards his preservation.

The practice in this case needs little or no comment. The reason why opiates were not made use of, was that the child rested tolerably well at nights, except when his asthmatic fits disturbed him, and then the longer he had slept the worse was the ensuing fit. In his phlegmatic habit, therefore, an opiate, by causing too great a collection of phlegm, would have been attended with danger of suffocation, and might indeed have proved suddenly fatal.

When he was almost free from his asthmatic complaint, he was seized with a pain in his side, similar to that which he had felt at the beginning of the last violent attack. This pain, therefore, required particular attention, especially as the child had lately gained flesh,

and was fuller of blood. Accordingly he was bled immediately with four leeches, and had a gentle dose of physic the next morning; which relieved the pain in his breast, and prevented any inflammatory affection.

Afterwards he had a pain in his right knee, which continued a few days and then disappeared. Pains in the extremities, as was before observed, often succeed complaints of the breast, and whether mild or severe, powerful means in such cases should not be hastily used to remove them, lest the disease, not yet subdued, should be driven to the lungs, or to some other internal part. Poultices, fomentations, strong volatile liniments, &c. should not be immediately applied, but the pain in the joints, like a regular fit of the gout, should be viewed in a more favorable light. This child, through the whole course of his disease, took his medicines without any difficulty, which was a very pleasing circumstance; and indeed the medicines prescribed for him were always made as palatable as they could be.

As a further recommendation of the above-mentioned method of cure, I may just hint that the only son of the late Mr. N—— of Skelton,
was

was attacked with severe spasms of the lungs after the hooping cough, accompanied with sudden and violent difficulties of breathing, a very alarming convulsive cough, a copious and somewhat yellowish discharge from the lungs, great weakness and emaciation, a hectic fever, and all the usual symptoms of an approaching consumption. By the use of the Flowers of Zinc and a proper regimen, along with the anxious care of most tender and affectionate parents, he was happily restored to health.

C A S E XVI.

The Convulsive Asthma, complicated with the Humoral Asthma and Chronic Weakness, cured by the Flowers of Zinc.

JANE HARRISON, aged 60, November 18, has been subject to an Asthma for twelve or thirteen years past. It attacks her three or four times a day and continues about an hour. When the fit is upon her, she complains of a straitness in her breast, constant wheezing, scanty expectoration, and great difficulty of breathing, but at that time she is scarce able to cough. Her asthmatical complaint is the worst in winter, but it continues

all summer, and she is never clear of it. Pulse moderate. Body regular. She has had no appearance of the menses for the last ten years. Her habit of body is weak, thin, and relaxed, and she is much troubled with lowness of spirits.

*Capiat bolum bis die ex Florum Zinci granis sex
& conservæ absinthii scrupulis duobus; & super-
bibat decocti lignorum uncias tres. **

*Sumat hora septima vespertina pulveris ipecaco-
anbæ grana decem pro emetico.*

The 25th. Her Asthma is rather better. The emetic operated well and brought away much phlegm and undigested matter. Her medicines agree with her, and her appetite is improved. Her cough is troublesome, and without any expectoration. Her asthmatic fits are not so frequent, nor so violent as they were. She has a large room to live in, which is well ventilated. She often walks out in the open air, and finds herself better for it. She breathes the freest when she has the least on her stomach,

- * R. Ligni Guaiaci rasuræ,
Ligni Sassafras rasuræ, singulorum, unciam unam,
Radici Sarfaparillæ semunciam,
Radici Glycyrrhizæ, (sub finem coctionis addend.)
semunciam,
Aquæ fontanæ libras tres.
Coque ad colaturæ libras duas; & adde
Aquæ cinnamomi spirituosæ uncias tres.

stomach, on which account she always makes light meals, and eats little or no supper.

Repetantur remedia, sed constant singulae doses ex Florum Zinci granis decem.

December 1st. She continues to recover. Has been rather sickish these two last mornings, when she waked. The weather at present is very changeable, sometimes rainy, sometimes close and warm, and sometimes frosty. She can walk with more ease and strength than she did; her appetite is better, and her digestion stronger.

The 8th and 16th. She has for five days past had a regular return of her Asthma every afternoon at three o'clock, and the fit lasts about an hour. She is still sick at times with her medicines. The weather in general is thick, damp, and mild, though now and then there is a frost.

Repetatur bolus, sed constant singulae doses ex Florum Zinci granis octo.

*Omittatur decoctum lignorum, et vice ejus capi-
antur ter die decocti mucilaginosi unciae duo.*

The 23d. She finds herself better. Her medicines cause no sickness, and her breathing
is

is easier. The weather is very cold, and there is a hard frost.

January 1st and 9th. She is very feverish, and durst not come out to-day as the frost is intense. Her cough and stuffing in her breast are increased; and she has bad nights.

Continuentur remedia, Et sumatur omni nocte hora somni haustus anodynus,

The 15th. She is rather better than she was. Thinks her medicines have relieved her greatly in her asthmatic fits; but she is still stuffed in her breast, and at times very low-spirited. Her nights are easier since she took her draught at bed-time.

February 1st. She continued the use of the remedies above prescribed for about a month longer, and her cough, stuffing in her breast, and asthmatic fits, gradually left her. She was dismissed from her attendance at the Dispensary on the second of March, at which time her breathing was free and natural, her complexion clearer, her pulse fuller, and her appetite much improved. She had recovered her strength very considerably, slept well at nights, and was in good spirits. During the course of her disease, she now and then was troubled with a
little

little sickness at her stomach, which a few hartshorn drops removed.—In this case the Flowers of Zinc seemed evidently to take off the spasm of the lungs and to strengthen her weak and relaxed constitution; and considering her age and the long continuance of her complaint, the cure was performed in a shorter time than one could have expected. During her recovery she had her better and worse days, and, like all old Asthmatics, was very sensible of the influence of the weather.

C A S E XVII.

The Convulsive Asthma, with an enlargement of the abdomen, following the Measles, cured by the Flowers of Zinc and Calomel.

I Was desired, December 14, to attend Master B— three years of age, of a tolerably good constitution, who had had the measles some weeks ago, which had left a violent stuffing in his breast, with a cough and difficulty of breathing. His difficulty of breathing now comes on suddenly in an evening, and is followed by a troublesome cough. The fit lasts five or six hours, and the little sleep which he gets in the night is very troublesome, attended with mourning and constant wheezing. His
appetite

appetite is bad, belly bound and considerably swelled, pulse quick and irregular, but not very weak. Yesterday I advised three leeches to be set on the calf of his leg, and they bled freely for an hour.

*Sumat mane & vespere pulverem ex Florum Zinci granis duobus, & gummi Arabici granis tres, & superbibat misturæ salinæ unciam dimidiam. **

Capiat pro re nata mannae optimæ drachmas tres.

The 18th. The powder agreed well with his stomach, though now and then it occasioned a little sickness. His cough, stuffing in his breast, and difficulty of breathing are materially better, but the manna, given in a little tea, did not open his body till he took it three times a day. His belly still continues large and swelled.

Repetantur remedia, & sumantur bis die mannae drachmæ tres.

The 21st. His cough, stuffing in his breast, and difficulty of breathing are almost well, and he sleeps sound in the night without any mourning or wheezing. His pulse is slower and
more

- * R. Salis absinthii scrupulos duos,
Succi limonum quantum satis,
Emulsionis communis uncias duas cum semisse,
Aquæ cinnamomi spirituosæ unciam dimidiam,
Syrupi balsamici drachmam unam. M.

more regular; his appetite is somewhat better; but the largeness and swelling of his belly continues.

The 25th. The stuffing in his breast and asthmatic fits are entirely removed, but his belly continues large and hard.

R. *Mercurii dulcis, sexies sublimati, granum unum, sacchari albi grana quinque. Misce fiat pulvis omni nocte hora somni sumendus.*

R. *Olei olivarum optimi, Syrupi e meconio, singulorum, unciam dimidiam. Misce sumat omni mane cacblearia duo parva.*

Omittantur alia remedia.

The 30th. The powder agrees well with him. His belly is neither so hard, nor so much swelled, as it was; and he complains of no pain or griping in his bowels. He takes a little of his oil and syrup occasionally, and, along with his powder, it answers the purpose of procuring him an easy stool.

January 3d and 6th. He has taken the powder regularly, with now and then a little of his oil and syrup, and the swelling and

H h

hardness

hardness of his belly is entirely removed, and he has no return of his cough and difficulty of breathing. He looks much better in the face, his appetite is improved, and he is more active and lively.

It is evident in this case, that the measles had injured the lungs in a high degree. It frequently happens among different ranks of people, that the measles are much neglected, and the inflammatory state of the lungs is suffered to take its natural course, which causes pulmonary obstructions, and lays the foundation for Asthmas and consumptions. Timely bleeding, along with the cool regimen, it is well known, would in a great measure prevent those dangerous consequences of the measles, and save many valuable lives. In this child's disorder, proper bleedings had, through the mother's timidity and the child's apparent weakness, been omitted; and therefore his lungs were become very much obstructed and diseased, which had laid the foundation for the above complaint. To remove his Asthma, leeches, manna, and the Flowers of Zinc were prescribed, and they had the desired effect. The time of bleeding after the leeches dropt off, was limited to one hour, which was proportioned

portioned to the child's strength, and is in these cases the safest and most certain way of proceeding. It is in general very wrong in the disorders of children to allow them to bleed till the discharge of blood stops of itself. I have seen much mischief arise from this inaccurate mode of practice, by taking away a greater quantity of blood than was requisite, so as to induce a dangerous weakness from too great emptiness of the blood-vessels.

The Flowers of Zinc agreed well with this child. The manna was repeated twice or thrice a day till it had procured a few easy stools, which is in general the best way of giving opening physic to children; for some will require a double quantity to move them, and others not above one quarter of the usual dose.

When the Asthma was cured, the body of the child still remained hard and swelled, which seemed probably to arise from some internal obstruction, along with a quantity of slime and wind in the bowels; for the removal of which a few powders were ordered, each of them containing a grain of calomel. During the time of using this excellent deobstruent medicine, the child was kept in as pure an air as possible, and

his diet was carefully regulated by his mother according to my directions. The oil and syrup was given with a view to prevent pains in the bowels, which, in some cases, attend the use of calomel.

CASE XVIII.

The Convulsive Asthma, in a child eight months old, following the Measles, cured by the Flowers of Zinc and Tinctura Thebaica.

A Child of Mr. —, eight months old, February 6th, appears full in the face, high colored, bloated, and swelled; but her limbs and other muscular parts are considerably wasted and smaller than they were. She had the measles about three months ago, and has been troubled with a cough and asthmatical complaint ever since. The fits are short, lasting only a quarter of an hour, but they recur frequently, particularly in the night, and her difficulty of breathing is then very severe, attended with much wheezing and rattling of phlegm in her throat. Her body is bound, skin soft, pulse quick, and she is feverish in an evening. In consequence of the frequency of her fits, her nights are extremely restless and disturbed, and she

she is obliged to have her head laid very high. She did not suck above six or seven weeks. She was then weaned and brought up with the spoon. Her mother finds that she breathes the worst when kept close and warm.

Hirudo cruri applicetur.

R. Florum Zinci granum unum,

Sacchari albi grana quinque.

Misce, fiat pulvis, bis die sumendus.

R. Olei Ricini,

Syrupi Violarum, utriusque, unciam dimidium,

Misce, sumat drachmam unam bis terve in diem.

The 10th. She was bled with the leech as directed, and the discharge of blood was continued for an hour. The oil and syrup keep her body open. Her fits of difficult breathing are still very violent. She was sick and vomited the first dose of her powder, but the rest have agreed well with her. Her stomach was foul, and she threw up much viscid matter. Her sleep and appetite are very bad.—Her face is not quite so full and florid as it was,

Hirudo cruri applicetur.

Continuentur remedia, antea præscripta.

R.

*R. Aquæ fontanæ drachmas quinque,
 Syrupi Mororum drachmas duas,
 Aquæ cinnamomi spirituosæ drachmanam unam,
 Tincturæ thebaicæ guttas sex.
 Fiat mistura, cujus capiat drachmas tres
 omni nocte, hora decubitus.*

The 14th. Her breathing is somewhat easier, and her asthmatic fits less violent. Her pulse is 162, her face red and swelled, and her cough troublesome at times. The leech bled freely; and her body continues open with the laxative syrup, but she begins now to refuse it.

Omni nocte sumat pro dosi mixturæ anodynæ drachmas tres.

Omittatur mistura oleosa, & sumantur pro re nata manna optima drachmæ duo.

The 18th. Her asthmatic fits are both less frequent and less violent, so that her difficulty of breathing and rattling of phlegm in her throat are considerably abated. She took two tea-spoonfuls of the anodyne mixture, and rested better in the night. Her cough still continues troublesome, but it is easier than it was. Her appetite is improved, and she is somewhat stronger. Her body is regular with the manna, and she is not sick with her powder.

The

The 23d. She continued the use of the medicines above-mentioned for about six weeks longer, and found great relief from them. The dose of the anodyne was increased gradually to four drams; half a grain of the Flowers of Zinc was added to the powder; and the laxative was continued regularly as directed. In consequence of a steady perseverance in those remedies, the cough, wheezing, stuffing in her breast, and frequent sudden returns of difficult and laborious respiration, along with that red swelled bloated appearance in her face, gradually went off. Her legs, thighs, arms, and body grew more firm and fleshy. She slept well in the night; her appetite was good; and she recovered her strength, activity, and liveliness.— About a year after I saw her again. She had continued well, and was a strong healthy girl.

The appearance of this child was very much against her. Her face was swelled, her cheeks bloated and high-colored, altho' the muscular flesh of her limbs and body was wasted, and felt extremely loose. Such an appearance as this evidently shewed, that the general circulation of the blood was not free, and
that

that the return of the blood from the head was greatly interrupted, in consequence of the disease of the lungs. At the same time the distribution of the blood to the extremities and trunk of the body was imperfect, and of course the nourishment of those parts defective. This child had had the measles some months ago, which had left obstructions in the lungs, attended frequently with feverish symptoms in the night. On those complaints, the spasms of the lungs supervened. For the treatment of the disease, we refer to the case, and shall only just observe, that heat was particularly hurtful to this child, that she was always the easiest in the cool air, and that her stays and bandages were found very tight about her, so as greatly to obstruct respiration. How far this last cause, and the early weaning of the child, may have contributed to bring on the disorder of her lungs, it is not easy to determine. As she grew better, the swelling and fulness of her face subsided, her color became much less florid, and her extremities grew firmer and more fleshy.

CASE

C A S E XIX.

The Convulsive Asthma, complicated with the Humoral Asthma and Chronic Weakness, cured by the Flowers of Zinc.

MRS. — aged 40, November 19, of a dark complexion, and thin habit of body, is troubled with a cough, stuffing in her breast, and sudden difficulty of breathing, particularly when she wakes in the night, at which time, being very much oppressed, she is obliged to sit up in bed, and gets no ease till she spits up some phlegm. Thirst. Bad appetite. Copious but difficult expectoration. She has had four miscarriages and seven children, the last of which was born four months ago, and she has never been well since. She has had no return of the menses after her delivery. Let the child be weaned.

R. *Florum Zinci drachmam unam,*
Speciei aromaticæ scrupulos duos,
Syrupi Balsamici q. s.

*Fiat massa, in pilulas xxx dividenda, quarum sumat duas mane & vespere, & superbibat cacblearia tres Misturæ Cardiacæ. **

I i

Capiat

* Vide page 178.

Capiat hora somni haustum anodynum cum tincturæ thebaicæ guttis viginti; neçnon mane pro re nata, quando constipatio alvi adsit, rhei pulveris grana decem.

On the 26th she was much better, and in three weeks after she was perfectly free from her asthmatical complaint. Her bodily strength too, and the complexion of her skin were much improved.

I shall only just take notice here of the number of children and miscarriages which this Lady had had; and the subsequent reduced state of her constitution. I found likewise on inquiry, that, contrary to the present improved practice in midwifery, she had been accustomed to be kept very hot during her lyings-in, and to be very liberal in the use of cordials and spirits, and by those means was exposed to two very powerful causes of the Asthma,—excessive heat and strong liquors. She was likewise in the habit of giving suck to her own children, which, besides having the bad effect of injuring their health and of rendering them weak and fretful, is very fatiguing and distressing to a Lady of a delicate relaxed constitution. When I saw her, it was necessary for her immediately

mediately to wean the child or to provide a wet nurse for it, otherwise that single cause of general debility continuing to act, would probably have defeated all our best efforts to cure her. The cordial mixture, tinctura thebaica, Zinc pills, and rhubarb, had a very good effect, in removing the spasms of her lungs, and in strengthening her general habit of body. *

C A S E XX.

The Convulsive Asthma, complicated with Chronic Weakness and Rheumatism in the Head, cured by the Flowers of Zinc.

JAMES KITSON, aged 28, admitted at the York County-Hospital, December 31, 1781, is subject to violent pains and sudden stoppages in his breast, so that he can hardly get his breath, followed by a cough and spitting. This complaint is of six months standing. He is pale, thin, and troubled with severe head-achs. His shortness of breath is the worst when in bed, though it now and then attacks him severely in the day-time. He has a rash about his stomach which itches much. Pulse weak.

I i 2

* Vide Treatise on Chronic Weakness, where the regimen of lying-in women is fully considered.

weak. Thirst. Costiveness. Cold sweats in the night. The pain in his head (which seems to be rheumatic) is sometimes very violent; extending to his ears, and renders him unable to move his head. His appetite is bad, water-gruel and broth forming the chief part of his diet.—For those complaints he had *uncia quatuor misturæ purgantis, pilulæ ex Floribus Zinci tres mane ac vespere, Et uncia duo ter die decocti mucilaginosi cum julepo e camphora.*

January 3d. His head-ach is very severe, but his cough and asthma are rather better. He had five stools with the physic.

Sumat bis die Florum Zinci grana duodecim in conservæ absinthii draagma una, Et superbibat misturæ spiritus Mindereri cum julepo e camphora uncias duas.

Capiat mane haustus senæ purgantis uncias quatuor,

The 7th. The pain in his head and ears is easier, his Asthma much better, appetite improved, good nights, no stool with the physic.

Continuentur bolus Et mistura, Et repetatur cras mane haustus senæ purgans, addendo

Mercurii dulcis sublimati grana quatuor, Rhei radices pulveratæ grana sex.

The

The 10th. The physic answered well. He has no cough or difficulty of breathing, but still has an eruption on his stomach, and likewise on his arms, neck, and head.—For those complaints, as well as for some continuance of the head-ach, he had an emetic, the solutive electuary with rhubarb, and a warm decoction of the bark; and on the 15th of February he was free from complaint, except some remains of languor and weakness. Let him be dismissed,

C A S E XXI.

The Convulsive Asthma, in a child five months old, cured by the Flowers of Zinc and an Antimonial Vomit.

JAMES CUDDY, aged five months, admitted at the York County-Hospital, November 4, 1782, has had a troublesome cough for three weeks past, and breathes very ill, particularly in the night. His difficulty of breathing is so violent whenever he wakes, that he throws his head back as if he were going to expire in a fit. He was bled with a leech yesterday. His body is loose; his pulse cannot be felt; his cough strains him and forces away his stools. He is sick and sometimes reaches
with

with his cough, but generally swallows the phlegm which he gets up. His cough is frequently so violent that it resembles the whooping-cough, and makes him turn black in the face. His nights are very restless, for he never sleeps above 15 or 20 minutes at a time. He is very hoarse, and scarce able to cry so as to be heard.

Sumat bis die pulverem ex Florum Zinci granis duobus & sacchari albi granis quinque.

R. Syrupi balsamici,

*Syrupi limonum, singulorum, drachmas sex,
Mucilaginis gummi Arabici sesquiunciam.*

Misce. Dosis caclearia duo parva, sæpe in diem sumenda.

The 7th. The medicines agree, and the child is considerably better.

Repetantur remedia.

The 11th. He continues to recover. He is not sick with his medicines. The fits of difficult breathing, or (to use his mother's phrase) his choking fits, are entirely removed. His cough still continues severe, and he gets up some phlegm, but swallows it. Body regular. Nights easier. Hoarseness continues.

Repetatur Pulvis & Syrupus mucilaginosus.

R. Tartari

R. *Tartari Emetici granum unum,*
Aquæ fontanæ drachmas decem,
Syrupi mororum unciam dimidiam,
Aquæ Cinnamomi spirituosæ drachmas duas.

*Fiat mistura, cujus capiat cachlearium unum par-
 vum omni semihora ad quartam vicem, nisi prius vo-
 mitus ciatur vel alvus soluta sit.*

The 18th. Two tea-spoonfuls of the tartar emetic mixture made him very sick, and he vomited freely, and was much relieved by it. He has very little cough or shortness of breath, sucks well, but was restless in the night, and is rather hot and feverish to-day. He has been much less troubled with phlegm since he took the antimonial vomit. His pulse is moderate, and distinctly to be felt. He has two or three stools a-day, is asleep now, and breathes well.

*Continuetur Pulvis & Syrupus mucilaginosus, &
 repetatur cras mane Mistura Antimonialis.*

The 25th. He vomited freely with three tea-spoonfuls of the tartar emetic mixture. No feverishness, appetite good, sleep natural, he can breathe well, has no return of his asthmatic fits, looks clear and lively in the face and eyes. He has a trifling cough remaining, but it is almost entirely gone. Let him be dismissed.

CASE

CASE XXII.

*The Convulsive Asthma, following the Influenza,
cured by the Flowers of Zinc.*

MR. —, aged 40, October 1, had lately the influenza, and the cough continues with a stuffing and difficulty of breathing, so violent at times, that he frequently cannot bear to lye down in bed at nights, but is obliged to rise and sit up. His asthmatic fit comes on suddenly about two or three o'clock in the morning, and continues for an hour or two; then leaves him, and he falls asleep. When he wakes again in the morning he has a return of his difficulty of breathing, equally severe; and sometimes he is attacked with it during the course of the day. In the fit, his cough is troublesome, and, towards the end of it, he discharges a good deal of phlegm. At other times his breathing, as at present, is tolerably free and easy. His face has a livid blackish appearance, and his lips are of a deeper red than natural. His pulse is not weak but rather quick. His voice is not so clear as usual. Belly regular. Legs swell towards evening. Habit of body neither thin nor corpulent. His complaint is of three months standing, and
at

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at first arose chiefly from the influenza, but he had before been subject to slight attacks of the Asthma from cold.

Mittatur sanguis ad uncias decem.

*Sumat alterno mane electarii solutivi drachmam unam *.*

R. *Florum Zinci drachmam unam cum semisse,
Extracti glycyrrhizæ drachmam unam,
Syrupi balsamici q. s.*

Misce, fiant pilulæ triginta, quarum æger sumat duas vel tres ter die, & superbibat julepi menthæ uncias duas.

The 8th. The symptoms are rather easier. His laxative did not answer.

Sumat pilulas quatuor Zinci ter die.

Capiat omni mane vel nocte olei olivarum unciam dimidiam.

Repetatur electarium solutivum, addendo

Rbei pulveris,

Pulveris jalapii, singulorum, semidrachmam.

The 12th. He was much better last night than he has been for several weeks past. He was sick with his powder but did not vomit. The swelling of his legs is diminished. His

K k

face

* Vide page 205.

face has less of that dark livid appearance. His cough and spitting—stuffing, oppression at his breast, and difficulty of breathing—are considerably better. His body is open with the oil and electuary, pulse 65, voice clearer, appetite good.

Repetantur remedia, sed capiantur solummodo pilulæ tres pro dosi.

The 22d. He continues to recover.

The 28th. He is materially better since the last report. He coughs sometimes, but his stuffing and asthmatic fits are almost gone, returning but seldom, and continuing only a few minutes, or at most a quarter of an hour. His spitting is less, and the phlegm comes up easily. He has no pain in his breast, his appetite is good, and he has one or two stools every day.

Omittantur pilulæ Zinci.

Repetatur electarium solutivum.

R. *Infusi Corticis Peruviani uncias duas, **
Pulveris Corticis Peruviani scrupulum unum.
Fiat haustus ter die sumendus.

November

Vide note at page 174.

November 24th. He continued those medicines regularly for some weeks, and they agreed well with him, except that now and then they caused a little sickness. He takes a tea-spoonful of his opening electuary once in two or three days and his oil every day, which keep his body regular. He had, within this last month, a few slight returns of his Asthma, but they grew less and less, and on the 18th of December he had no complaint except a trifling cough. He is able to use exercise freely, and feels himself stronger. He has recovered his natural complexion, has a good appetite and easy nights.

The asthma of this Gentleman originated chiefly from the influenza in the summer of the year 1781. At York and its environs, the influenza for the most part was a mild disease, requiring little more by way of medical treatment than pectorals, demulcents, or gentle stimulants. In some cases, however, it was very violent, and was attended with symptoms of pulmonary inflammation, such as, an acute inflammatory fever, a violent incessant cough, severe pains in the head and breast, great stuffing and constant difficulty of breathing. In those cases a proper medical treatment was of

the highest importance, and, from the want of it, many dreadful consequences ensued, particularly tubercles of the lungs, and pulmonary consumptions. Those bad effects were most frequent to such as had narrow chests, weak lungs and a delicate fibre, or had been formerly subject to frequent catarrhs or any other pulmonary complaint; but sometimes they took place in strong, robust, plethoric constitutions. The remedies which I found the most successful in those severe cases of this highly infectious disorder, were blood-letting, emetics, laxatives, blisters, antimonials, particularly tartar emetic, along with a low diet, small diluents, and other articles of the cooling regimen. Those remedies, timely and judiciously employed, took off the inflammatory state of the disease, prevented pulmonary obstructions, asthmas, and other dreadful maladies. Afterwards the bark, along with country air and exercise, restored the tone of the system, and completed the cure.

Mr. ——— having been formerly subject to an asthma in a slight degree, and afterwards neglecting proper medical assistance in the influenza, was seized with a return of his asthma in a very alarming manner, in consequence of which the circulation of the blood through the lungs
was

was greatly interrupted, as was evident from the difficult lying, the livid blackish appearance of his face, and deep unnatural redness of his lips. It is a melancholy reflection, and can never be too frequently or too strongly inforced, that notwithstanding such incredible numbers die every day of asthmas and pulmonary consumptions *, many should still be so inattentive to disorders of the lungs at their commencement, when, by proper remedies and a suitable plan of life, a radical cure might easily be obtained. Nothing is more common than for an influenza, or a severe catarrh, in consequence of the neglect of proper treatment, to lay the foundation of the most obstinate pulmonary complaints. Afterwards the same persons, when they are harrassed day and night with violent incurable asthmas, would spare no labor or expence nor murmur at any kind of restraint, under the hopes of obtaining relief; but then unfortunately it is too late, and nothing but vain hopes remain to comfort them for a while, till the flattering delusion is over, and they find it necessary to sit down as contentedly as they can with their disorder for life, reflecting often with regret on those errors of their conduct, by which

* Vide the Bills of Mortality.

which so much real misery has been brought upon themselves.—This gentleman's case, tho' a very alarming one, was successfully cured by the plan of treatment which was adopted.

With this remark I conclude the Zinc Cases, after the perusal of which every unprejudiced reader will, I hope, agree with me in thinking, that the Calx or Flowers of Zinc is an useful and efficacious remedy in the asthma. As this remedy is not yet in general practice, and as some, but little acquainted with its operation, have not allowed it the virtues which it undoubtedly possesses, it will not, I flatter myself, be thought that I have given too many cases in proof of its utility, or made too many observations on its effects. I find indeed, among my notes, many other dangerous and critical cases of the asthma, in which the Flowers of Zinc have been employed with success, but I should not wish to encroach too much on the patience of my readers. If I have only related a sufficient number to procure the medicine a fair trial, it will need no further recommendation from me; for it will often be found to succeed in severe and obstinate cases of the Asthma, which will not yield either so certainly

or

or so speedily to other medicines now in practice.

As Zinc is perfectly safe, and at the same time sufficiently powerful in its operation, its value is greatly increased. Its action upon the stomach is very considerable. Sometimes indeed a moderate dose of it excites nausea, or even vomiting. We have seen in the above cases, that a very few grains have produced that effect on some, and that others could bear a large quantity.

If any Gentleman, from one or two unsuccessful trials of it in epilepsy, is, after what has been said, still doubtful of the power of its operation in asthmatical disorders, I should only request of that Gentleman to attend to the following particulars;—first, that his Zinc be pure and free from adventitious admixtures;—and secondly, that the calcination of it be perfect, and there be none of the Zinc in its metalline form;—and then I doubt not but he will very soon have cause to change his opinion. Indeed I have more than once found this remedy so active in its operation, that some very irritable stomachs, even in adults, could not bear above two grains of it in any form. Ablution, or
washing

washing in water, will easily separate the uncalcined from the calcined Zinc; and the latter, being lighter, may be poured off among the water as soon as the other is sunk to the bottom. Afterwards the calcined part or flowers, being specifically heavier than water, will gradually subside, and, the water being poured off, they may be dried for use. This operation is necessary where the Zinc is imperfectly calcined, otherwise a very dirty metalline sediment will, if the medicine be given in a liquid form, separate and fall to the bottom.

We have seen in the foregoing cases, that some patients, who were very ill of the Asthma, were speedily cured by the Flowers of Zinc, and that others required a longer time before the disease was subdued. My rule of practice, in all old and obstinate cases, was this.—If I gained ground, although it was but slowly, I was content to persevere in the use of the remedy, till I had either entirely, or in great measure removed the disease.—But if, after a fair trial, I found no benefit accrue from it, as must sometimes happen to all remedies given in this disorder, I then endeavored to satisfy myself, as well as my patient, with the employment of others.

We

We have frequently had occasion to mention in the foregoing cases, that Zinc, in its effects, is antispasmodic, expectorant, and strengthening. With regard to the mode of its operation, it may not be improper here to remark, that as it is readily soluble in acids, both vegetable and mineral,* the acid of the stomach will frequently act upon it, as it does upon James's powder, liver of antimony, and several other remedies of a metalline nature. This too may be one reason why the operation of Zinc is so much more active and powerful in some constitutions than in others, in proportion as the acid of the stomach is stronger or in greater quantity. Hence too we see the necessity of beginning with small doses in weak irritable habits, and especially where we have reason to expect acidities in the first passages. Without attention to this particular, the action of the remedy will sometimes be too strong. Experience alone can ascertain this point; and, in all dubious cases, we should begin with a dose of two or three grains, and gradually increase it according to its effects. Sometimes a first dose of Zinc will create sickness or even vomiting, and the succeeding ones, after the stomach is cleared, will stay very easily and give great

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relief.

* Vid. Dictionnaire de Chymie.

relief. But if Zinc should constantly create sickness, we must diminish the dose, otherwise the patient will soon be obliged to desist from the use of it. The form of pills, when they can be swallowed without difficulty, is in general the most agreeable to the palate, and sits lightest upon the stomach, especially if a dose of a cordial stomachic medicine is taken immediately after them, which is grateful to the patient, and correspondent in its operation to that of Zinc. But when pills (any more than boluses or electuaries) cannot be swallowed with ease, which is sometimes the case in asthmatical disorders, the remedy must be given in a liquid form,

PART

PART III.
CASES of ASTHMA,
CURED or RELIEVED
BY THE USE OF
SQUILLS, CREAM of TARTAR, MER-
CURY, and BLOOD-LETTING.

CASE XXIII.

The Convulsive Asthma, complicated with a Dropsy of the breast, following an inflammation of the lungs, in which dried Squills were employed with success.

WILLIAM SILVER, of middle age and an emaciated habit of body, admitted at the York County-Hospital on the 20th day of January, 1777, has had a violent inflammation of his lungs some months ago, followed by a dropsy of the breast, in which

he felt the water distinctly move within him. He complains at present of a cough with great oppression and difficulty of breathing, which symptoms attack him on a sudden, particularly after his first sleep and after exercise or any quick motion, and continue frequently for an hour or longer. He complains too of rheumatic stitches in different parts of his body. His urine is in smaller quantity than natural. Pulse quick, weak and irregular; expectoration difficult and scanty; thirst great; appetite but indifferent; body not bound. His complaints are of ten months standing.

Capiat ter die Pilulas Scilliticas tres, & superbibat misturæ salinæ uncias duas.

The 27th. His medicines cause no sickness. He makes water more plentifully. His cough, load and anxiety in his breast, and sudden attacks of laborious respiration, are rather less violent, and he spits more freely.

February 6th. His asthmatic fits are less frequent and less severe. His thirst is moderate; appetite better; pulse stronger; body open; and rheumatic pains much easier.

The 13th and 27th. He continues to recover.

March

March 6th. No complaint. Let him be dismissed.

This man had a complicated disorder of an asthma and dropsy in his breast, after an inflammation of his lungs. Dissections have fully proved, that water in the cavity of the chest is a frequent consequence of inflammation*. He had not only the usual symptoms of the hydrothorax or dropsy of the breast, but he had a distinct sensation of a fluctuation of water within him†. Dr. Cullen, in his definition of the hydrothorax, has, with his usual accuracy, taken particular notice of this symptom—*aqua in pectore fluctuans*. ‡

Rheumatic stitches, in different parts of his body, succeeded the inflammation of his lungs, which I considered as a favorable circumstance, for nothing is more common than for a first inflammation to subside after the commencement of a second. This man had been in the utmost danger of his life from the inflammation of his lungs, but had just had strength enough to struggle

* Morgagn. de Caul. & Sed. Morb.

† Vide page 23, where we have given the distinction between the asthma and the dropsy of the breast.

‡ Vide Cullen's Synopsis.

struggle through it. . When I saw him, his constitution was very much reduced, and nothing then remained but to assist the operations of nature in promoting a gentle discharge by urine and expectoration; for which purpose the dried squills, along with a saline mixture, seemed evidently indicated, and their operation did not disappoint me. Any of the more violent evacuations, such as bleeding, purging, or sweating, would have greatly interrupted the salutary efforts of nature, and in all probability have sunk his strength, and consequently have been very pernicious to him.

C A S E XXIV.

The Convulsive Asthma, complicated with the Humoral Asthma, Chronic Weakness and universal Dropsical Swellings, relieved by the Vinegar and Oxy-mel of Squills;—together with an account of the disease of John Strickney, who died and was opened.

EASTER SMITH, aged 50, admitted at the York County-Hospital, May 21, 1781, of low stature and florid complexion, appearing rather full in the face, complains of a cough and spitting, attended with great difficulty

culty of breathing, which comes on suddenly, particularly in the night about twelve or one o'clock. Her asthmatic fit is preceded by a working in her bowels that continues for an hour or longer. She has been troubled with her present complaint at different times for nine years, but has been very ill of it since last December. She is often feverish, and has a pain in her back, with hot fits in the night, during which she sweats considerably. Her body swells in a morning. Her legs and thighs are somewhat wasted but swell towards evening. Her pulse is low and weak; body costive; menses regular, but in small quantities. By my direction, at the Dispensary, she took at twice a powder consisting of *Florum Zinci grana decem & rhei pulveris grana quindecim*, which gave her several stools without any sickness, and relieved the uneasiness both in her breast and stomach.

R. *Aceti Scillitici uncias tres,*
Oxymellis Scillitici uncias duas. Misce.
Sumat ex quovis vehiculo unciam dimidiam ter die,

Capiat, si opus sit, pilularum Rufi. tres vel quatuor.

The 24th. She complains that her medicines are too sour and sharp for her, and produce sickness and griping. Her face to-day looks
 pale

pale and phlegmatic. Her body is open without taking any of her laxative pills. Her difficulty of breathing and other asthmatical symptoms are easier.

Repetatur mistura, sed capiantur solummodo drachmæ duæ pro dosi.

The 28th. The weather is warm, the thermometer 65 in the shade. She is still sick in a morning with her mixture, and sometimes throws up much phlegm, but can bear it in an evening without sickness. Her pulse is weak, and she has generally one or two stools a day.

The 31st. She complains of being very hot and subject to sweating both day and night. Her cough and difficulty of breathing are better, she spits less and with greater ease. The thermometer is 70 in the shade,

June 7th. She can take four drams of her medicine at night without sickness, but two drams of it makes her sick in a morning fasting; and by coughing and reaching, she gets up a considerable quantity of frothy yellowish well-digested phlegm, which is intermixed with some of a bluish dark color. Her body continues open.

The

The 11th. Her pulse is weaker, and, for the last two or three days, she has had each day several feverish attacks, preceded by coldness, and followed by heat and sweating. She was very faint and low last night. Her cough is troublesome; the weather rainy and cloudy; thermometer 58.

Continuentur remedia.

*Capiat julepi menthe cum confectiōe cardiaca
uncias duas in languoribus.*

The 18th and 25th. Her cough is better, but shrill and close. Her cordial julep relieves her. The watery swellings of her body, legs, and thighs are greatly diminished. She rests better in the night, and is not so feverish and languid as she was.

July 2d and 12th. She has little or no return of her cough and asthma; looks well; appetite good; pulse natural; body regular. Half an ounce of her squill mixture in the mint julep agrees well with her in a morning fasting, and produces no sickness. Let her be dismissed.

M m

This

This is a case of the convulsive asthma, complicated with the humoral. Her florid complexion, and the appearance of fulness in her face, might at first sight have seemed to have indicated bleeding; but her pulse being very small and weak, forbid the use of the lancet, and more especially as her disorder had troubled her at times for nine years past. The young and unwary practitioner may easily be deceived by the appearances of the face in asthmatical disorders; in which, the circulation of the blood being much obstructed, the cheeks often look red and bloated, particularly after any hurry or exercise, when there is no real fulness of blood in the constitution. Without attention to this fact, he will be surprized to find his patient the next morning appear in the face pale, thin, and fallen, when he had concluded her the day before to be full, high-colored, and plethoric. Hence when the pulse and general habit of body does not correspond with the appearances of the face, and the present symptoms are not very urgent, it is often prudent in dubious cases to wait a day or two, or at least to see the patient a second time before blood-letting or any other evacuation is advised, lest the
salutary

salutary operations of nature should be counteracted, which in many cases would be highly dangerous.

This patient attended me at first at my Dispensary, and I gave her the Flowers of Zinc as an antispasmodic, along with a laxative. Afterwards she took the vinegar and oxymel of squills. As that remedy seemed perfectly adapted to the case, I was resolved to give it in a full dose, and accordingly the patient was ordered to take half an ounce of the mixture three times a day. That quantity made her vomit before breakfast, but not in an evening, which is the case with most medicines which have that tendency. Vomiting for a few mornings, before she got up, was of service to her*, and afterwards I diminished the morning dose. By these means we kept her stomach clear and her body open, promoted expectoration, obviated spasmodic constrictions of the lungs, and relieved all her asthmatical symptoms.

M m 2

When

* We frequently find, in asthmatical disorders, that a gentle puke given in a morning, an hour or two before the patient rises, and repeated occasionally, is very useful. This practice is now much in use.

When she was very low, she had a cordial julep, which not only revived her spirits, but proved a convenient vehicle for her squill-mixture, by means of which she could take in a morning, without sickness, the full dose which was at first prescribed. The opening pills were not used, as the squill-mixture rendered them unnecessary. This patient made heavy complaints against her medicine, but, as she was recovering, I recommended to her perseverance in the use of it, and she could have no just excuse for not following my advice. On the 12th of July she thought herself sufficiently recovered to enter upon her usual employments, and therefore was at her own request dismissed before the cure was quite compleated, although she was much relieved, and by fresh air, gentle exercise, and a regular diet, would in all probability be very soon restored to perfect health.

As the case of JOHN STRICKNEY resembled the foregoing in several particulars, both in the symptoms and method of treatment, it may not be unacceptable to the reader to have a short account of it here, along with the appearances of his body after death.

JOHN

JOHN STRICKNEY, aged 60, admitted into the York County-Hospital, July 6, 1780, has an Asthma, attended with continual stuffing in his breast, sudden difficulties of breathing, a bad cough, a copious viscid expectoration, severe pain in the small of his back, and dropfical swellings of his legs, thighs, body, penis, and scrotum. There appears too, by an unusual fulness and obscure fluctuation, to be a little water contained in the cavity of the abdomen. His body is regular, pulse low, urine in very small quantity. He has no appetite, and feels himself very weak and heavily oppressed with his complaint. His nights are restless and disturbed, but he can bear to lie down in bed. He has been long in a very diseased state of body, but lately the symptoms are much worse and more alarming. His flesh is wasted; his eyes are sunk and heavy; his skin dry, foul and scurfy; his face fallow, depressed, and melancholy *.——10th. His dropfical swellings and difficulty of breathing are worse, and he grows weaker. Frequent sickness at times. No appetite. Little urine. Body regular.——17th. The symptoms increase.——27th. He is weaker, and appears to be sinking fast.——31st.

* The remedies which were given as palliatives, are mentioned among the remarks upon the case.

31st. He has been feverish for the last two or three nights. No appetite. No pain. Cough but trifling. Breathing very laborious. Dropsical swellings increased, and the wrists of his hands swell and pit on pressure.—August 3d. He is lethargic, and appears to be almost dead.

He died in a few hours after I left him. On the next day I desired his body might be opened, and was present at the operation. In the abdomen there was a small quantity of water, but all the abdominal viscera were sound. There was too a little water in the chest, and about three ounces in the pericardium. The lungs subsided as soon as the chest was opened, and appeared to be not much diseased; and I did not perceive any obstruction about the heart. We cut into the substance of the lungs, liver, &c. but found no ulcer, no internal obstructions from effusions of blood, nor any scirrhus hardnesses*. As the head was not opened, we can say nothing with certainty of the appearances within the cranium; but from the

* My judicious and worthy Colleague, Dr. Swainston, informed me, that in several cahectic patients which he had seen in the course of his practice, the appearances on dissection were similar to those of the above-mentioned patient, and that there was no particular organic fault which he could observe.

the lethargy before death, and from dissections in similar cases, think it highly probable that the brain would at last partake of the same general dropfical state, and have somewhat more water than usual within its ventricles.

The disorder of John Strickney, as both Dr. Swainston and myself expected, ended fatally. He had delayed too long before he applied for advice, so that his constitution was intirely ruined, and the time elapsed in which medicine might have afforded relief. At his own request he was put on milk-diet, and by little additions of wine and light animal food, we endeavored to make it gently nourishing and restorative. As he voided but a small quantity of water, the *mistura scillitica* & *electarium cremoris tartari* were ordered as diuretics; but as the last might prove opening, he took only two or three drams of it twice a week, so that it seldom gave him more than an easy stool each day. Afterwards we tried blisters to the calves of his legs, and a cordial mixture, along with bitters and the salt of tartar; but all was to no purpose.

Concerning the prognostic in this case, the following particulars are to be remarked, as denoting

denoting a fatal termination.—The age of the patient, and the duration of his disorder—his great and constant obstruction to respiration, as well as sudden difficulties of breathing—severe pain in the small of his back and scanty secretion of urine—general dropical anasarca swellings of his feet, legs, thighs, body, membræ virilia, and wrists of his hands, all which parts pit on pressure—the fulness and obscure fluctuation within the abdomen—bad nights, total want of appetite, vomiting, wasting of flesh and bodily weakness, foul dry skin, and pale fallow countenance, with a dull heavy melancholy appearance in his eyes. His cough had formerly been very troublesome, attended with a copious viscid expectoration; but it grew weaker as his strength failed him, and intirely left him a short time before his death. Neither had he any pain for many days before he expired; although it was evident that his strength was sinking fast, and that the general bodily anxiety, which accompanies those complaints, was daily increasing. Just before his departure he became feverish, and fell into an apoplectic state.

There is nothing to add concerning the dissection, but that one might have expected a greater and more manifest destruction of some

one

one or other of the internal viscera. The brain, when I first saw him, could not be very much affected with aqueous effusions, as his senses were clear and perfect, and he had no pain, weight, or giddiness in his head. Neither was there sufficient evidence of any fixed obstruction about the heart or great vessels; for tho' his pulse was low, yet it was distinct and regular. On dissection the same observation was found true, when applied to the lungs and abdominal viscera. As, therefore, there was no ulcer, no fixed obstruction from effusions of blood, nor internal hardness or scirrhus in any of the viscera, his death must be attributed in part to his asthmatical complaint, and in part to a general want of tone, or (as it is commonly called at his time of life) a breaking up of the constitution, in consequence of which an universal dropsy or anasarca took place, or (in other words) a superabundant quantity of water was exhaled into all the internal cavities, and into the cellular membrane in almost every part of the body. The constitution of this man gives one as perfect an idea of what some physicians have called a Cachexy, as almost any I ever attended.

CASE XXV.

The Convulsive Asthma, complicated with severe Head-achs, and violent dropical Swellings of the lower extremities, cured by Cream of Tartar, and the Peruvian Bark.

ELLEN COOPER, aged 53, admitted at the York County-Hospital, June 7th, 1779, has a swelling of her feet, legs, and thighs, which feel very hard, and pit much on pressure. The skin is not discolored, but it is tense and shining. She has had dropical swellings of her lower extremities for five weeks. She complains heavily of head-ach and sickness at her stomach. Her head indeed is sometimes in such extreme pain, that (to use her own expression) she thinks it will split, and that she shall leave part of it on the pillow. She wakes too every morning about four or five o'clock with a violent difficulty of breathing, which continues for an hour or two, and then leaves her. She has had no return of her menses for some years past. Her belly is not swelled, cough moderate, expectoration scanty. She has frequently

quently a rising of froth and water from her stomach, and is much troubled with wind. She has for some time past had a constant stuffing in her breast; but her asthmatic fit, or sudden shortness of breath, which comes upon her when she wakes in a morning, began about the latter end of April, and has continued ever since. Pulse natural, skin cool, body regular, and her constitution, though considerably reduced, is yet in tolerable condition.

Capiat ter die misturæ nitrosæ uncias tres.

Sumat bis septimana Electarii Cremoris Tartari drachmam unam omni hora ad tertiam vicem.

June 10th. Three tea-spoonfuls of the electuary gave her many watery stools. She is somewhat better of her head-ach and asthmatical complaint; and her legs and thighs are rather less swelled.

Repetatur ut antea mistura & electarium, sed capiatur solummodo electarii drachma una ad secundam vicem.

The 14th and 17th. The swellings of her legs continue, but are rather less than they were. There is to-day a slight redness on her ancles, attended with an uneasy prickling sensation. Her legs still shine and pit, and her difficulty

of breathing is very troublesome in a morning, but it is not so severe as it was. She took only two tea-spoonfuls of the electuary, and they gave her several stools. The pain in her head is less violent; and she expectorates a little phlegm with tolerable ease.

The 24th. The symptoms are evidently abated. The swellings of her legs are much less, though her ancles still continue somewhat redder than natural. The rising of froth and water from her stomach is at times very troublesome to her.

Continuentur remedia, & capiantur bis die spiritus lavendulae compositi guttae quadraginta.

The 28th. Her asthmatical complaint and swelling of her legs abate. The right leg is redder than the left; but the left is more swelled than the right. She complains of sickness from her electuary.

Repetantur remedia.

July 5th. She continues to recover. Says her complaints are always sensibly relieved by the electuary.

The 8th. The stuffing in her breast and asthmatic fits in a morning still continue, though less

less severely. She expectorates more freely with her cough. The pain in her head, tho' better upon the whole, is sometimes very bad.

The 15th. The weather is remarkably hot. She complains more to-day of head-ach and difficulty of breathing. Her legs are much better, and the redness of the skin abated.

The 18th. Her head-ach continues bad at nights. She is feverish and vomits her electuary. Her Asthma, upon the whole, is much better, although at present it is troublesome—and the swelling and redness of her legs is almost gone.

Sumat ter die Decocti Corticis Peruviani uncias duas vel tres; & pro re nata, quando alvus astricta sit, pilularum Rufi duas.

The 25th. Her shortness of breath has been gradually diminishing since she began to take the decoction of bark, and is now materially better. Her appetite is improved, her stomach stronger, head-ach almost well, and the swelling of her legs scarcely perceptible.

August 2d. She continues to recover.

The

The 12th. She has no complaint except a little stiffness in her ancles. Let her be dismissed.

This is a case of the Asthria, complicated with violent dropfical swellings of the feet, legs, and thighs, in which the skin was very tense and shining, and afterwards became inflamed in several parts, from the great distension which it underwent. A most severe head-ach, attended with sickness and foulness at her stomach, was also added to her afflictions, along with a total cessation of the menstrual discharge; the whole forming a combination of symptoms, which frequently presents itself to the medical practitioner. Her constitution, however, was not greatly reduced by long continuance of her disease, nor by improper treatment.

I thought it, therefore, adviseable to make trial of the cream of tartar electuary, which is strongly recommended by very able physicians in dropfical cases, as being both laxative and diuretic. At first she took three tea-spoonfuls of it, allowing an hour between each tea-spoonful; but as that quantity operated too briskly, she afterwards took only two thirds of it,

it, which seemed to procure a few easy stools and answered very successfully. By this medicine, along with a nitrous mixture, the superabundant quantity of ferous fluids in her constitution was gently evacuated, and her dropical symptoms intirely removed, which evidently afforded relief to the complaint of her lungs, in which the cellular membrane in all probability was considerably distended with serum. The above opinion is confirmed by this consideration, that the asthma and continual stuffing in her breast were very troublesome, although she had but little cough or expectoration of phlegm.

When the dropical swellings were removed, and the electuary was become disagreeable to her, but some asthmatical symptoms still remained obstinate, owing probably to the heat of summer, I gave her a decoction of the bark with the pil. Rufi,—the last to keep her body regular, and the first to take off the spasm and irritability of the lungs, and to restore tone and vigor to her relaxed constitution, by which means the cure was soon compleated.

I need not add that the cessation of the menstrual discharge, or what is commonly called

called the change of times, is a very critical period in a woman's life, or that some women are very ill at the first part of that change, and others not till the menses have left them for two or three years. The complicated disease of this patient began at the latter end of April; I saw her first on the seventh of June; and she was dismissed from her attendance at the Hospital on the twelfth of August. I call the above facts to remembrance for the sake of observing, that this disorder began in a mild season of the year, and increased as the warm weather advanced, which is not so common an occurrence as the reverse, and shews the Asthma to have been more purely of the nervous kind, although attended with dropical symptoms.

C A S E XXVI.

The Convulsive Asthma, complicated with a venereal ulcer in the nose, cured by Mercury and the Peruvian Bark,

MR S. —, aged 33, May 25th, complains of a cough and difficulty of breathing, which symptoms attack her in a sudden and violent manner. The convulsive affection

affection of her lungs abates generally in an hour or two, but leaves behind it a wheezing, stuffing, and constant obstruction to respiration. Her face is pale and rather swelled. Her nose on the right side is very red and inflamed externally; and there is a painful ulcer within, which discharges a thin matter, and has continued nearly in the same state for many months. Her menses and body are regular, appetite but indifferent, expectoration scanty, pulse and heat both natural.

Fiat foniculus in brachio sinistro.

R. Corticis Peruviani pulveris unciam dimidiam,

Aquæ fontanæ libram unam.

Coque ad colaturæ uncias octo.

R. Hujusce decocti uncias duas,

Aquæ cinnamomi spirituosæ drachmas duas.

Fiat haustus ter die sumendus.

June 1st and 9th. Symptoms continue the same.

Repetatur haustus ut antea.

R. Mercurii crudi drachmas duas,

Terebinthinæ argentoratensis drachmam unam.

Optime terantur simul donec nullum argenti vivi vestigium appareat; addendo, pro re nata, guttas aliquot olei terebinthinæ. Dein adde,

O O

Extracti

Extracti glycyrrhizæ mollis scrupulos sex,

Pulveris glycyrrhizæ scrupulos octo.

*Aqua fontana, si opus sit, misce, & fiat massa,
in pilulas nonaginta dividenda. Sumat unam mane
& vespere.*

The 22d. The pills agree well with her, and she finds that her cough and difficulty of breathing are less troublesome, and the ulcer of her nose somewhat better.

The 29th. Her cough and other asthmatical symptoms are removed. The redness, pain, and ulcer of her nose are diminished. Body regular. She has a little soreness of her gums. Let the pills be omitted for a day or two, and then repeated as before.

July 4th. She has no soreness of her gums. Her nose continues to heal. She complains that she is loose in her body, and has griping pains in her bowels.

Omittatur haustus roberans.

Continuentur pilulæ mercuriales,

R. Julepi e creta unciam unam & dimidiam,

Tincturæ thebaicæ guttas septem,

Aquæ cinnamomi spirituosæ sesquidrachmam.

Fiat haustus ter die sumendus.

The

The 10th. She still continues to be griped and purged, altho' she has taken the astringent draught six times in twenty-four hours. She complains of cold and chill fits.

Omittantur pilule & haustus.

Alternis noctibus Unguenti Cærulei Fortis drachma una & dimidia diligentissime fricetur super femur vel crus per horæ spatium.

R. Aquæ menthæ vulgaris simplicis,

Aquæ menthæ piperitidis simplicis, utriusque, uncias tres,

Confectionis cardiacæ drachmas duas,

Aquæ cinnamomi spirituosæ drachmas sex,

Spiritus lavendulæ compositi drachmas duas.

F. mistura. Sumat æger unciam unam & dimidiam ter die, præcipue in languoribus & frigoribus.

The 24th. She has rubbed herself carefully with the ointment as directed. She has no looseness or griping. Her appetite is improved. Her gums are rather sore. The complaint of her lungs has never returned, and her nose is almost well.

August 12th. She has no complaint.

In this case the Asthma was complicated with an ulcer of the nose, which I suspected to be venereal. After having ordered the bark as a tonic, and examined sufficiently into the state of her constitution and the nature of her complaints, I was soon resolved, by the obstinacy of the symptoms, to have recourse to a mercurial pill. This I gave in a mild but most effectual form *, by which means the asthmatical symptoms were soon removed, and the venereal ones much lessened.

After having continued the mercurial pill for some time, it began to produce griping pains and loose stools, which in weak bowels is a common effect of even the mildest mercurial, taken internally. To obviate this pernicious tendency, the tinctura thebaica was prescribed, and its dose gradually increased to a considerable length, but without any lasting good effect.

Not wishing to continue the tinctura thebaica any longer, I ordered the mercurial unction to be used, which is an excellent substitute in such cases, when complicated with weakness of the stomach and bowels. This had the desired effect;

and,

* Vide Fordyce's Elements of Practice.

and, as soon as the pills were omitted, the griping and purging immediately left her. The use of the mercurial ointment requires great attention, and indeed much of its efficacy depends on the industry of the patient;—for if it be imperfectly rubbed in, it has little or no effect;—and if it be rubbed in with more force than is requisite, its operation may be too strong and a salivation excited. For this reason punctual directions ought to be given to the patient how it is to be used, and what time and attention is requisite for performing the friction, together with the parts of the body which from time to time are to be rubbed. I own I am desirous of having the breath tainted and the gums rather sore, altho', if we be certain of the quantity and goodness of the medicines employed, the venereal symptoms will often give way, and the disorder cure well without those sensible effects of the action of mercury, *

It must be confessed that I should not have ordered mercurial medicines so early to this patient, if the venereal ulcer in the nose had not indicated them. I find several cases among my

* Vide the Author's Treatise on the Use and Abuse of Medicine, where the use of mercury in the venereal disease is particularly considered.

my notes very similar to this, which were treated successfully in nearly the same way. The employment of mercury in the asthma was mentioned before in a former part of this treatise*, and its success in this instance is very obvious, for the asthma soon disappeared after it was used.

C A S E XXVII.

The Convulsive Asthma, of seven months standing, complicated with teething and inflammatory obstructions of the lungs, in a child fourteen months old, cured by the Mercurius dulcis, Anodyne Syrup, and Flowers of Zinc.

THOMAS MORLEY, aged fourteen months, admitted a patient at the York County-Hospital, January 4, 1781, has a cough, constant wheezing and shortness of breath, and also sudden attacks of difficult respiration. His face is pale, but does not look very thin. He still continues at the breast, although he sucks at times with great difficulty on account of the shortness of his breath. He has been ill of his present complaints above seven months. They began with a bad fever,

* Vide note, page 119.

which

which arose from cold. His flesh is wasted, body regular, skin cool, and he seems now to have little or no fever. His belly is swelled and bigger than natural, and he has only got four teeth.

Sumat omni mane pulverem ex mercurii dulcis sexies sublimati grano uno, & sacchari albi granis quinque.

R. Syrupi althææ,

Syrupi mororum, utriusque, semunciam.

Tincturæ thebaicæ guttas octo. Misce.

Dosis drachma una omni nocte ad cubitum eundum.

The 8th. He is more chearful and lively, breathes easier, wheezes less, and rests better in the night. His pulse is weak, but not quicker than natural. His stools come from him more freely, and there is among them an appearance of slime and skins of worms, but he has no pain in his bowels,

The 11th. His voice is clearer, stronger, and more natural; breathing easier; stools moderately loose.

Repetatur pulvis, sed capiat tantum unum alternis noctibus.

Sumat syrupi anodyni drachmam unam & dimidiam, vel, si opus sit, drachmas duas.

The

The 15th. His mother suspects that he is getting a tooth, as he bites hard at the nipple, and has an increased flow of saliva. His medicines agree well with him, and occasion no griping pains. He breathes much better, and with less wheezing and rattling of phlegm; his voice continues clearer and stronger; body regular and less swelled; appetite good; eyes more bright and lively, and he begins to look clearer in his complexion.

Continuetur syrupus anodynus, & omittatur mercurius dulcis.

The 22d. He is evidently getting a tooth. He breathes somewhat shorter to-day and with greater difficulty, coughs more, and is loose in his body.

Capiat bis die pulverem ex Florum Zinci grano uno & sacchari albi granis tribus.

Omittatur syrupus anodynus.

The 26th. His body continues loose. He breathes a little better, wheezes less, and is more chearful and lively. The syrup has been omitted, but he has taken the powder regularly, and it has agreed well with him.

Reperatur pulvis ex Flore Zinci.

Sumat

Sumat misturæ Tartari Emetici cochlearia duo parva omni semibora ad tertiam vicem, nisi prius vomitio vel alvi-fluxus supervenerit.

February 1st. He did not vomit with three doses of the tartar emetic mixture, but it gave him a few loose stools. His belly continues somewhat bigger than natural. He still wheezes, has a rattling of phlegm in his throat, and breathes with difficulty.

Continuetur Pulvis Florum Zinci.

The 4th. He breathes with more ease; has little or no cough; wheezes less. His medicines agree well with him, he has better nights, and takes his food with an appetite.

The 10th. He continues to recover; is stronger upon his legs, and looks better in the face.

The 19th. He has no complaint, except now and then a little shortness of breath against any material change of weather. Let him be dismissed.

This child began to have a disorder of his lungs at a very early period, for he was not then above six months old; and when I saw him,

it was become so violent, that his life was in the greatest danger. A natural question here arises,—From what causes does the complaint proceed? The diet and regimen of children ought to be so simple, that one should hardly suppose an Asthma to be a frequent disease among them; and yet it is an undoubted fact, that it not only does take place in infancy* but much oftener than one would imagine.—The causes which I have observed to operate most frequently and most powerfully in bringing on asthmatical complaints in infancy, are tight stays or bandages around the body, excessive heat, imprudent exposure to cold, and gross feeding.

It is a melancholy observation, that the first of those causes proves fatal to many. I have seen pulmonary obstructions, asthmas, inflammations of the lungs, and even convulsions arise from it.—Excess of heat likewise is often very pernicious to infants, for unskilful nurses frequently hold them on their knees exposed to a hot fire, where they are compelled to breathe an air heated to a dangerous excess. This soon stupifies a child and throws it asleep, especially if its vessels be too full of blood; and then

* Floyer.

then the injury it may afterwards receive, is very great. — With regard to imprudent exposure to cold, nurses are apt to forget that the constitution of an infant is very tender, and that a slight degree of unaccustomed cold will act powerfully upon it, particularly after having been previously heated. — As to the last-mentioned cause, gross feeding, some parents, as well as nurses, fondly imagine that art can provide a more wholesome diet for children than nature. Led away by this erroneous opinion, they not only allow the tender infant to suck plentifully, but afterwards compel it to swallow a quantity of spoon-meat, by which means the child, if it be not suddenly carried off by colic pains or convulsions, becomes fat and gross, and in consequence of being too much filled with blood, its weak vessels are over-distended. This state of fulness is particularly hurtful to the lungs of infants, and lays a foundation for pulmonary obstructions, asthmas, and inflammations. *

Thomas Morley had evidently obstructions in his lungs, and those, as his complaint at its

P p 2 com-

* I have seen many cases of inflammation of the lungs in infants; and was present at the opening of the bodies of several who died, which put the disorder out of all dispute.

commencement was severe and attended with a fever, had in all probability been the consequence of previous inflammation. At the time when I first saw him, his constant wheezing and shortness of breath, along with a cough and sudden attacks of difficult respiration for near eight months, was a very sufficient proof of obstructions and spasmodic affections of the lungs. By this long disease, his constitution was greatly injured, his body was become large, color pale, flesh wasted, limbs small and emaciated, but his face did not look proportionably thin and fallen. He had been slow in getting his teeth, and therefore had many more still to cut. Whether or no he had worms, was not certain, because he had not parted with any which had been observed. As his body was large and harder than natural, the mesentery probably was somewhat obstructed, a complaint which dissections have proved to be very common among children,

With this view of the disease, a few doses of a gentle mercurial were indicated, as deobstruent, laxative, and antispasmodic, and they had the desired effect; for they kept his body regular without producing any griping pains in the bowels, and discharged a quantity of matter, which

which had the appearance of slime and skins of worms. He had likewise an anodyne syrup at night. By the use of those two remedies his cough, wheezing, and difficulty of breathing were abated, and the child grew more chearful and lively. His nights were easier and his voice became clearer, shriller, and more natural, which is a symptom worthy of observation, as it is of great weight in the prognostic of all pulmonary complaints, and particularly in those of children who are unable to express their feelings. His appetite likewise was improved, which shewed that the mercurius dulcis agreed well with him. After he had taken those medicines for about ten days, he cut a tooth, which was evidently accompanied with an increase of the complaint in his breast.

If a child have a disease in his breast, the cutting of a tooth, as it often excites pain, fever, and general irritability, will, as in the present case, be found commonly to increase it. But this affords no proof why a cough and shortness of breath, with pulmonary obstructions in the lungs, should be thought a necessary attendant on teething. According to the best of my observations, it is an indisputable fact,

fact, that healthful children cut their teeth without a cough, and, when in others a cough attends teething, it is in general an accidental circumstance, proceeding from a local complaint in the breast, and is not merely symptomatic of the cutting of a tooth. The violence of the cough,——the rising of phlegm from the lungs,——inflammations, pulmonary obstructions, and ulcerations, which have followed, and been proved by dissection,——have fully convinced me of the truth of the above assertion. I should not have dwelt at all on this fact, if I had not observed that the notion, which I am endeavoring to refute is pernicious to society, and productive of fatal consequences. For when we say that a cough with shortness of breath, is a common symptom of teething, we unite the two complaints together under one idea; and as we consider teething as natural and necessary, the other being united with it and regarded only as an effect, falls in under the same general idea, and consequently is too often supposed to require no particular treatment, by which means it is neglected, and in many instances proves fatal.

After this patient had taken the mercurius dulcis, as above directed, for ten or twelve days,

days, that remedy was omitted, and the flowers of Zinc prescribed, which had a happy effect in still further diminishing the cough, wheezing, and difficulty of breathing. Those remedies were given to him regularly, till on the 19th of February he was free from complaint.

After he had taken the flowers of Zinc for about eight days, I prescribed the tartar emetic mixture, with a view to promote a gentle vomiting, and discharge of phlegm both from the lungs and stomach; but it did not answer that intention. It procured him, however, a few loose stools, which were of service to him. The above dose of the tartar emetic mixture is in general sufficiently strong to occasion vomiting. Sometimes one dose of it even will vomit a child of that age, and now and then a second in irritable habits will operate violently.

CASE

C A S E XXVIII.

The Convulsive Asthma, complicated with an Inflammation of the Lungs, cured by Blood-letting, Blisters, Laxatives, &c.

MARY ROBINSON, in the 45th year of her age, admitted at the York County-Hospital, on the 16th of October, 1777, complains of head-ach, colic pains in her bowels, wind at her stomach, and rheumatic pains in her legs and feet, which are somewhat swelled. She is costive; but her menses are regular, skin cool, pulse natural. She has short but frequent fits of difficult breathing along with a dry cough, which complaint she has been often troubled with for some years past. Her employment is that of a washerwoman, in consequence of which she has been much exposed to vicissitudes of heat and cold. Her general habit of body appears to be moderately full, but somewhat relaxed.

Sumat misturæ pectoralis unciam unam et dimidiam bis die,—haustum solutivum cras mane—& loboch sanans sepe in diem.

The

The 20th. The phyfic operated well, and gave her several stools, which relieved the pain in her bowels. Other symptoms are nearly as before.

Continuentur remedia, & repetatur cras mane haustus senæ purgans.

The 23d. There is little or no alteration in her complaints since the last report, except that her countenance is heavy, tongue somewhat furred, and she appears languid and fatigued. She took the solutive draught as directed, and it answered well.

The 27th. On Saturday the 25th, she was seized suddenly with a severe pain at the lower part of the sternum and across the pit of her stomach, attended with a violent cough and difficulty of breathing, and an obstinate vomiting of every thing she took. This morning I called upon her at her own house, and found her confined to her bed in the situation above-mentioned, with the symptoms all increased. She was very feverish. The vomiting continued. Her pulse was quicker and fuller than natural; urine high-colored; tongue foul; skin hot and dry; thirst great. The pain across the pit of her stomach was severe, her breathing very

difficult and laborious, and she had a troublesome cough which greatly increased the pain. She afterwards made no further complaint of the pain and swelling in her legs and feet. She was ordered to be bled immediately to the quantity of ten ounces; and in twelve hours the operation was to be repeated. A blister likewise was applied across the pit of her stomach; glisters administered occasionally; and the following mixture prescribed.

Sumat misturæ saline unciam unam & dimidiam quarta quaque hora.

The 28th. She has been bled twice, and her blood is tolerably firm, with some appearance of the buff-coat. The blister answered well, and she has had two stools with the glister. The symptoms are rather easier than they were yesterday. Her pulse is softer but still quick. The vomiting is very severe. Cold water stays on her stomach when nothing else will, and gives her no pain. She has taken the saline mixture at times when her stomach could bear it. Her breathing continues very laborious with considerable wheezing and great tightness across her breast, so that she is obliged to have her head and body raised high with pillows. Her tongue is foul and her skin hot, but they are not so dry

as they were. Her urine is high-colored, and she has constant thirst, but can take no solid food of any kind.

The 29th. The pain across the pit of her stomach is much easier, but her cough is more troublesome, and she has a severe pain on the left side a little above the short ribs, which is increased on motion and pressure. Her sickness and vomiting continue. Her difficulty of breathing is very great, altho' she expectorates a little more phlegm. Cold water is still the most grateful and refreshing to her, and she drinks plentifully of it. Her pulse is tolerably regular, and not so quick as it was. Her tongue is foul, and her countenance continues heavy, sunk, and distressed. She eats nothing, sleeps very little, and that in a most confused manner. She had a stool with the glister.

Repetatur mistura, & applicetur emplastrum vesicatorium parti dolenti.

The 30th. She had a blister on her side last night, and it has discharged well. She continues to take the saline mixture at times. Her pulse is weak and considerably quicker than natural, but tolerably free. The pain in her left side is easier, but her breathing is laborious,

and she still feels a great tightness across her breast. She has been able to eat a little light pudding to-day, which she has not thrown up. Her cough is very troublesome and violent, particularly after eating or drinking any thing, and her expectoration scanty and difficult.

Repetatur mistura & enema.

R. Julepi cardiaci unciam unam & dimidiam,

Tinctura Thebaica guttas quindecim,

Florum Zinci grana quinque.

Fiat haustus, hora somni sumendus.

The 31st. Her draught at bed-time agrees well with her, and since she took it, she has coughed less, spit more freely, and slept better at nights. She is extremely weak, but has no pain, sickness, or vomiting. Her breathing is still very difficult. Her thirst is abated; she has some little return of appetite; her pulse is rather slower; her urine deposits a lateritious sediment; her skin feels cooler and moister, and her tongue is less furred.

Repetantur medicamenta.

November 1st, 2d, and 3d. She continues to recover. Her pulse is low, and not above 68. Her medicines agree well with her.

Omittatur

*Omittatur mistura salina, sed continuetur haustus
& enema, & sumatur julepi cardiaci uncia una &
dimidia bis terve in diem.*

The 10th. She has not been able to attend as an out-patient since the 23d of last month, at which time this severe illness first attacked her. She gains strength daily, and seems in a fair way of recovery.

The 17th. She is able to attend at the Hospital to-day. Her cough and difficulty of breathing are much better, though now and then she has slight returns of them. She says her draught at night has made her rest better, and afforded her much relief; but by my direction she begins now to omit it.

The 20th. She was continued an out-patient a few weeks longer, during which time she was ordered *mistura asthmatica uncia una bis die*; but as that medicine came up again into her mouth and caused a sickness and spitting, it was changed for the volatile cordial julep, which seemed to agree well with her. On the 29th of December her cough and difficulty of breathing had intirely left her, and she was dismissed from

from her attendance at the Hospital, free from complaint.

This proved a case of great danger, and seemed, from her previous general indisposition, to have been hanging upon her for some time. Her lungs were in a very irritable state, and subject to convulsive affections. Her pulse at first was natural; she had no fever; and was able to attend at the Hospital as an out-patient.

On the 25th of December (which was the ninth day after her admission at the Hospital) she was seized with a severe pain at the lower part of the sternum and across the pit of her stomach, attended with violent difficulty of breathing, great tightness over her breast, and a painful cough, along with a severe fever and an obstinate vomiting of every thing she took.

On the 27th in the morning I saw her for the first time after this alarming attack. She was bled plentifully twice that day, and had a blister applied in the evening. It would have been better if she had been bled on the first day of the inflammation, but I did not know of her situation till the third. She had taken two gentle
doses

doses of physic during the first nine days of her attendance at the Hospital, which I considered as a favorable circumstance; for, as her stomach afterwards was so extremely irritable and the vomiting so constant, it would, if she had been costive and her bowels loaded with fæces, have been extremely difficult, if not impossible, to have procured her a free passage; and then certainly it would have proved very alarming, if not fatal, to have had a fit of the colic with costiveness complicated with the above disease. But as things were, a gentle glister, occasionally repeated, was sufficient to keep her bowels in an easy state. The saline mixture was given to promote perspiration, diminish the fever, and allay the vomiting; but it did not succeed well in this case.

On the 2d day of my attendance, which was the 28th, her pulse was softer, breathing easier, pains somewhat diminished, and therefore bleeding was not repeated.

On the 29th the pain across her breast was easier, but her cough, difficulty of breathing, sickness and vomiting continued severe. Her pulse at the same time became slower, and was tolerably regular, and her fever was much abated.

abated. It then appeared to me that the convulsive affection of her lungs, with great general irritability of habit, constituted the chief part of the remaining disease; along with a rheumatic pain in the left side. As she was too weak and relaxed to bear bleeding a third time, another blister was ordered, which caused a plentiful discharge, and gave great relief to the vomiting and pain of her side.

As her difficulty of breathing and tightness across her breast was still troublesome, and at the same time her stomach began to bear a little food without vomiting, I prescribed on the 30th an anodyne draught with five grains of the flowers of Zinc, which, as an antispasmodic, had evidently a powerful effect in procuring rest, quieting the cough, and relieving the difficulty of breathing. Afterwards by the use of a volatile cordial mixture, along with proper nourishment, fresh air, gentle exercise, &c. she gradually recovered from the very weak state to which she had been reduced.

The above combination of symptoms appeared to arise chiefly from a chronic catarrh and spasmodic affection of the lungs, on which an inflammation of that organ had supervened,

pervened, which rendered the case extremely critical and dangerous. Floyer very justly observes that this complication of disorders is generally fatal; and indeed that was the termination which I was afraid of in the above case for several days successively. The vomiting, which continued incessantly for so long a time, of every thing but cold water, was, together with the rest of her complaints, a very alarming symptom. Cold water in this case seemed evidently to be serviceable, and as nature at first had pointed it out to her, I did not think proper to forbid it. It was cooling, diluting, antispasmodic, and as it excited no pain in the stomach, but evidently lessened the vomiting, I knew of nothing which could with equal propriety have been substituted in its place. Many eminent physicians, and particularly the late Dr. Gregory, have recommended cold water in inflammations of the lungs, and Floyer observes that the convulsive Asthma is generally relieved by it. There was in this case evidently no inflammation of the stomach to contraindicate the use of cold water; for the action of vomiting produced no great increase of pain, and cold water sat perfectly easy on the stomach, which certainly would not have been the case had that most sensible and irritable organ been inflamed.

R r med.

med. The vomiting seemed to arise from that general law of the animal œconomy, which is founded on (what Physicians term) the consent of parts, and more especially when the parts affected are as near to the stomach, as in the present case.

C A S E XXIX.

The Convulsive Asthma, complicated with an Inflammation of the Lungs of four days standing, cured by Blood-letting, Blisters, Laxatives, &c. to which is added an account of the cases of Jane Beesforth and Mrs. —, both treated successfully by the same remedies.

JOHNN BOTERILL, 28 years of age, March 28th, 1782, had, when I first saw him, all the symptoms of a most violent inflammation and spasm of the lungs — fever, bad cough, bloody expectoration, severe pains in the breast, difficult lying, along with a difficulty of breathing so violent, that he had all the appearance of a man struggling for breath in the very last moments of life. His pulse at the same time was quick and full, with great heat and thirst. These complaints having continued with uncommon violence for four days before my first visit, I ordered him to lose sixteen

ounces

ounces of blood that morning; and as his blood was firm and fizy, his pulse high, and the symptoms a little relieved, the operation was repeated in the evening to the same quantity. On the morning following, — his pulse being still quick, full, and strong, and the symptoms, though somewhat abated, yet violent, — he was bled again to the quantity of sixteen ounces. The next morning, for the same reasons, he was bled to ten ounces more. He had in the mean-time diluents, saline mixtures, oily emulsions, linctuses acidulated with spirit of vitriol, blisters, gentle laxatives, along with pure air and the cool regimen; by which means he recovered, and had no complaints remaining on the 9th of April, except a cough, stuffing in his breast, and weakness, which were in a few weeks removed at the York County-Hospital by the *mistura asthmatica*, *loboch sanans*, *haustus senæ purgans*, *mistura spermatis ceti cum essentia antimonii drachma una omni dosi*. A mild, low, regular diet, and gentle exercise in the open air, greatly forwarded his speedy and perfect recovery.

On my first visit to this patient, there never was, to all appearance, a more miserable object. The anxiety which attended the disease

was inexpressible, so that his whole body was in a dreadful agitation, with no other prospect but that of immediate suffocation. On a strict examination into his case, no symptom gave me the smallest hopes of recovery till on feeling his pulse I found it quick, full, and strong,—and no remedy was so likely to relieve him as bleeding. Without bleeding he must have expired in a very few hours, as nothing else could have had any chance to have removed the inflammation and spasm of his lungs. As the first bleeding relieved him, and as the symptoms seemed to require it, the operation was repeated four times, so that fifty-eight ounces of blood were taken from him in the space of forty-eight hours, and with the happiest effect *. Blisters, laxatives, &c. were employed with advantage. If the bleedings had been made more sparingly, he might perhaps have recovered, but his recovery would have been attended with greater difficulty †. Larger effusions into the cellular membrane of the lungs, and more inveterate obstructions would probably have taken place, and have required a longer time to have removed them. We must, however, observe, that it would have been much better, had this patient been bled sooner,

* Cleghorn and Sydenham.—† Cleghorn.

fooner, because his complaint is one of those which often ends suddenly in suffocation, in consequence of the spasm of the lungs, the obstructed circulation and accumulation of blood, and effusions into the cellular membrane of that organ.

I have had several dreadful cases of this kind, treated nearly in the same manner; some of which, however, required bleeding more copiously than others, according to the age, pulse, bodily vigor, urgency of symptoms, appearance of the blood, &c.

The case of JANE BEEFORTH, of this city, a girl about nineteen years old, was another striking example of the same terrible disease, cured by blood-letting. She was bled to forty ounces of blood in eight-and-forty hours. She fainted after the second bleeding, but not after the third. Her disease, which was a complication of spasm and inflammation of the lungs, with a very bloody expectoration, had continued for several days before I saw her.

Mrs. —, of this city, recovered too from a like terrible disease, of the same standing, and attended with a spitting of blood, but she
could

could only bear bleeding twice in three days, because her complaint was complicated with a severe fever, towards the end of which there was a delirium with considerable depression of strength. When her disease began to abate, the alarming symptoms arising from the spasm of the lungs, after having continued for several days with the utmost violence, so far disappeared suddenly in one night, as to remove every idea of danger.

I find those two cases are fully taken in my notes, but it would be needless to trouble my reader with a longer account of them. The sudden abatement of the symptoms is clearly owing to the solution of spasm; and is in some measure characteristic of the disease. In those cases the severity of the complaint did not continue uniformly in the same degree; but was sometimes a little easier, and then returned with the most violent exacerbations, so that the attendants despaired of recovery, and expected instant death. Such exacerbations are often the most severe and alarming in the night. Though blood-letting is the chief remedy, and the rest of the treatment, no doubt, much inferior to it in efficacy; yet the patient, from the sudden and unexpected ease,

ease, which he finds on the solution of the spasm of his lungs, will often ascribe his cure intirely to some new linctus or different medicine last prescribed, which perhaps has evidently had the least part in the cure. It is worth remarking, that the pulse in this dreadful complication of maladies is fuller and stronger and the circulation freer, than when an equal difficulty of breathing occurs in a peripneumony from effusions of blood into the cellular membrane without any spasmodic affection of the air-vessels; and the reason of it is this, because the small blood-vessels in the lungs are not so much compressed in the first case, as in the last.

PART

PART IV.

CASES of ASTHMA,

IN WHICH THE

TINCTURA THEBAICA, MUSK,
CASTOR, CAMPHOR, ÆTHER,
ASAFŒTIDA, &c.

Were employed with Success.

CASE XXX.

*A Case of the Convulsive Asthma, complicated with
a Spitting of Blood, cured by Tinctura Thebaica,
Oleum Ricini, Emetics, Milk Diet, &c.*

JOHN LITTLE, aged 52, of a weak
habit of body, admitted at the York
County-Hospital, April 28, 1777, has been
troubled with a cough and asthma for several
years.

years. He has at present a great difficulty of breathing and sense of straitness across his stomach, with a pain in his breast. His pulse is low and weak but not quick, and he has no feverish symptoms. He has twice vomited up eight ounces of blood since Tuesday the 22d of this month, and coughed after it each time considerably. Expectoration difficult and sometimes bloody, appetite bad, sleep disturbed, body costive. Let him live on a milk and vegetable diet.

Sumat misturæ ex tinctura rosarum uncias duas quater die; — olei ricini unciam unam pro re nata quando alvus astricta sit; — balsami glycyrrhizæ cochlearia duo parva bis vel ter in die; — Et haustum anodynum ex Tincturæ Thebaicæ guttis sedecim omni nocte hora somni.

May 1st. The cough, difficulty of breathing, and pain in his breast are easier. He has spit no more blood. Expectoration freer; pulse rather stronger; body open; he rests better at nights, and gains strength.

Continuentur remedia, Et repetatur haustus anodynus ex Tincturæ Thebaicæ guttis viginti.

The 5th. He continues to recover.

The 8th. He complains of foulness at his stomach, but in other respects continues better.

Repetantur remedia, & sumatur vespere haustus emeticus.

The 15th. The vomit answered well, and brought away much phlegm and undigested matter. His throat is sore, but he has no pain in his breast, and all his other symptoms are easier.

Continuentur remedia, & repetatur haustus anodynus ex Tinctura Thebaica guttis viginti et sex.

The 26th. He has a load and oppression at his stomach. The soreness in his throat is removed, his cough is almost gone, and he has no return of difficulty of breathing or pain in his breast.

Continuentur remedia, & repetatur vespere haustus emeticus.

June 2d. The vomit answered well, and relieved the oppression at his stomach; and he is free from complaint, except a little soreness in his breast and throat.

The 9th. He has no complaint. Let him be dismissed.

This

This is a case of the Asthma complicated with a spitting of blood, in a patient whose constitution was weak and relaxed. He had, in the last six days before he came to the Hospital, vomited sixteen ounces of blood, which had alarmed him very much. When blood comes suddenly from the lungs, it excites a sensation in the throat as if the patient were vomiting it; but in this man's case the cough, difficulty of breathing, pain in the breast and bloody expectoration, shewed clearly from whence the blood proceeded. Besides it came up free from any mixture with the contents of the stomach, and was instantly followed by a severe fit of coughing.

As he had lately lost so much blood, and his pulse and general constitution were very weak, I did not think it right to advise bleeding, but recommended a milk and vegetable diet, by way of preventing afterwards any fulness in the vessels or general stimulus to the constitution. This practice may appear somewhat contradictory to those who have not well considered the subject; for it is natural to conclude, that if a patient be so weak as to render bleeding im-

proper, his diet should be more nourishing and restorative to obviate that weakness. But this reasoning is not founded on just principles. For tho' one durst not bleed, yet milder means of guarding against any fulness in the vessels with a view to prevent too great an accumulation of blood in the lungs, may be absolutely necessary.

Regulations of diet, therefore, are highly proper in such a case as this; and if directed with judgment will, as daily experience fully evinces, contribute much to the safety of the patient and the cure of the disease. For when any one is weak, a slight error in diet is capable of doing great mischief, by giving an irritation to the system, and disordering the circulation of the blood; and any aliment which affords too much nourishment in proportion to the strength of the constitution, is difficult of digestion and oppressive to the stomach. A diet, therefore, which consists of the mildest things, taken in small quantity, such as milk, ripe fruits, farinaceous and other vegetables, which are light and easy of digestion, are the most proper in this disorder, being sufficiently nutritive and yet not too much so. By regulations of diet, such as these, thousands are daily snatched from the grave, who in all probability would otherwise

otherwise have died of an Asthma, followed by a consumption. Proper regulations of diet are far more important in preserving a just balance between the quantity of blood and the tone of the vessels, than any temporary evacuations by bleeding or purging. None can possibly comprehend the full power and importance of such a plan of diet, but those who have steadily tried it; and few have resolution enough for the experiment, especially when perseverance for any length of time is required.

The tinctura thebaica in this case seemed doubly indicated, both as an antispasmodic and a sedative, by which operation it relieved the convulsive Asthma, quieted the cough, promoted expectoration, and diminished the irritation of the lungs, which last effect is of very great moment in such complicated cases as these.

The emetic draught, which consisted of ipecacuanha, was a very mild one, and given when his spitting of blood was intirely stopped, and his difficulty of breathing and other pulmonary symptoms greatly relieved. The foulness of his stomach indicated the use of it, and there was then nothing to fear from its operation.

operation. As the first emetic afforded considerable relief, another was given on the 26th with equal success. Perhaps the load on his stomach, if it had been suffered to have remained there, would have brought on a return of his difficulty of breathing, which might again have obstructed the course of the circulation so much, as to have occasioned a discharge of blood from the lungs.

With regard to the free use of emetics in the pure hæmoptysis, in which there is a frequent discharge of blood from the rupture of some considerable vessel, I am totally averse to the practice, as I think it a very dangerous one. But in many asthmatical and consumptive cases, where a little blood comes up pure or mixed with phlegm, a gentle vomit, if indicated either by foulness of the stomach or want of expectoration, may in general be very safely and advantageously prescribed; and indeed we have daily experience, together with the authority of the most able physicians, in favor of the practice. *

There are, however, cases of this kind in which I should be afraid of using even a gentle emetic;

* Cullen's public Lectures on the Practice of Physic.

emetic; as, for example, where there is any fixt great obstruction in the lungs, or where the fibres of the body are remarkably small, delicate, and relaxed; for, in such a state, it is difficult to answer for the consequences of the excitement of vomiting by an emetic, however mild. But even in such cases as these, if the patient should at any time be sick and vomit, there can be no hazard in giving a little warm water or chamomile tea to facilitate the operation and clear the stomach of impurities.

CASE XXXI.

The Convulsive Asthma, of three months standing, in a child eleven months old, complicated with a Catarrh, cured by Tinctura Thebaica, Leeches, Laxatives, &c.

WILLIAM DIBB, eleven months old, admitted an out-patient at the York County-Hospital on the 1st of May, 1777, has been troubled with a severe cough and stuffing in his breast for three months past. He coughs very much in the night. His breathing on a sudden is often so difficult that he appears as if he were choking. He is weak, languid, and restless.

restless. His pulse is quick and irregular; body bound, and he has very bad nights.

Hirudo cruri applicetur.

Sumat haustus senæ pro infantibus unciam unam & dimidiam.

R. Mucilaginis gummi Arabici,

Syrupi violarum, singulorum, unciam unam.

Dosis cochlearium unum parvum sepe in diem.

The 5th. He bled freely with the leech. Took his physic yesterday, and it operated both as an emetic and purgative. The symptoms continue the same, and he has still very bad nights.

Repetatur mistura, & sumantur Tinctura Thebaica guttae duæ hora somni.

The 9th. His cough, stuffing, and difficulty of breathing are rather easier, and his nights better.

The 15th. He has a looseness along with his other complaints; and his mother suspects that he is cutting a tooth.

Sumat Tinctura Thebaica guttas duas mane ac vespere.

Capiat julepi e creta cochlearium unum vel duo quarta quaque hora.

The

The 19th. His looseness is abated. The cough and other asthmatical symptoms, particularly the choking fits at night, grow less and less.

The 26th and 31st. He continues to recover.
Omittatur Tinctura Thebaica, et continuetur julepum e creta.

June 9th. He has the measles, accompanied with an increase of cough and stuffing in his breast, but without any of those sudden choking fits as before. Body regular.

Cruri applicentur birudines duæ.

Capiat misturæ ex spiritu nitri dulci unciam dimidiam ter die, & Tincturæ Thebaica guttas tres hora somni.

The 12th. He bled freely with the leeches. The symptoms of the measles are favorable. His body is open. Cough and stuffing are less troublesome.

The 16th. The measles have intirely disappeared; the cough and stuffing in his breast are abating every day.

The 26th. He has no complaint except a little feverishness at times.

T. t

Sumat

Sumat bis die julepi cardiaci unciam dimidiam.

Capiat mane haustus senæ unciam unam & dimidiam, & repetatur eadem dosis die mensis trigesimo.

July 7th. The physic operated well, and he has no complaint. Let him be dismissed.

The tender age of this child, the severity of the disease, and its duration, are particulars worthy of attention; for his case appeared so very alarming, that one could scarce entertain any hopes of his recovery. A great degree of fever and catarrh accompanied the asthma, with a continual stuffing in the breast, even when the fit was not upon him. Whatever phlegm came up from his lungs, it was generally swallowed; for he never got quit of any, unless now and then by the assistance of his mother. The leech and opening physic at first were strongly indicated by the violence of the disease. Afterwards it was necessary to have recourse to antispasmodics, and with this view the Tinctura Thebaica was prescribed, which had a happy effect in lessening the asthmatic fits, and procuring better nights.

On the 15th, the child had a looseness added to his other complaints, on which account

count he took a spoonful of the *julepum e creta* frequently, and two doses of the *tinctura thebaica* in twenty-four hours. It is highly requisite to increase the dose of the *tinctura thebaica* in the disorders of children, as well as in those of adults; but this must be done with much caution, and then it will often be productive of great benefit. If the dose be increased rashly, the effects of it may be very alarming, particularly in asthmatical disorders. For this reason too, the utmost care is requisite in preparing and mixing up such an active medicine as that for the use of children. The looseness soon abated with the above treatment, and his Asthma was almost cured on the second day of June, when the *tinctura thebaica* was omitted, as being too powerful a remedy to be continued without necessity.

On the 9th of June the child had the measles, attended with a cough and stuffing in his breast, but without any return of his asthmatic fits. To moderate the fever and to prevent any injury of the lungs from inflammation, he was, although the eruption appeared to be much out, bled immediately with two leeches, and the *tinctura thebaica* was again prescribed, along with the *mistura spiritus nitri dulcis*. Had I

known of his situation earlier, bleeding would have been advised during the eruptive fever of the measles. As his body was open, a laxative was not then necessary; but after the measles were over, the child took two gentle doses of physic along with a cordial julep. With this treatment he had no return of his Asthma, and was dismissed cured on the 7th of July.

C A S E XXXII.

The Convulsive Asthma, complicated with a spitting of blood, a pulmonary consumption, and an abscess in the lungs, which last broke and discharged a considerable quantity of blood, purulent matter, and skinny membranous substances, treated successfully by Tinctura Thebaica, milk diet, gentle riding exercise, &c.

JOHN MOOR, of Huby, aged 40, admitted at the York County-Hospital, March 16, 1778, has for some time past labored under a complaint in his breast, in which his lungs are very weak, and his respiration at times is greatly obstructed. His fits of difficult breathing at present are sudden, frequent, and severe, particularly on quick motion or when he first wakes from sleep, but they are not of long duration.

duration. He is troubled too with a violent deep-sounding cough; great stuffing and pain in his breast; and he cannot lie on his right side without an increase both of his cough and pain. He frequently spits up blood mixed with matter, which evidently appears to be purulent; and he is very subject to cold and hot fits and other symptoms of hectic fever. The quantity of pure blood, discharged at once, amounts often to about eight ounces. His legs swell, and sometimes his hands. His pulse is quick and weak; sleep disturbed; body rather open; complexion very unwholesome, somewhat florid, but considerably tinged with yellowness. He is of middle size and of a strong make. I desired him to live principally on a milk and vegetable diet, and ordered the following medicines.

*Sumat emulsionis oleosæ nitratæ uncias duas ter die,
& haustum anodynum hora somni.*

The 19th. His stuffing and difficulty of breathing are somewhat easier. He rests better at nights. Other symptoms remain as before.

The 23d. He is rather better, and has easier nights. The medicines agree well with him.

The

The 26th. Last night he had a severer cold fit than usual, which was succeeded by heat and sweating. The pain in his breast is somewhat abated. Other symptoms nearly the same.

The 30th. He spits blood again and is worse. He feels himself languid and oppressed. Pulse very weak and quick. Body regular,

April 6th. The spitting of blood still continues, and also his other complaints, along with great and sudden difficulties of breathing. Let him be made an out-patient,

The 9th. He leaves the Hospital to-day. The symptoms continue the same.

*Sumantur decocti mucilaginosi unciae duae ter die,
& repetatur haustus anodynus hora somni.*

The 13th. He rode on horseback last Thursday to Huby, which is nine miles from York, and he spit blood on Friday. He has rode nine miles to-day, has coughed much, and spit fresh blood. The medicines relieve him, and he has better nights.

The 20th. He spit blood yesterday, and is always easier after spitting blood. He rode
nine

nine miles this morning and has spit no blood, but complains to-day of great soreness in his breast and difficulty of breathing. Pulse 120. His body is bound at times. He feels himself so weak that he can scarce walk.

Repetantur remedia; & capiatur electarii solutivi cochlearium unum parvum pro re nata, quando constipatio alvi adfit.

The 27th. He has spit little or no blood this last week; is stronger; his appetite is better; and his pains are diminished. He complains of great shortness of breath to-day. Pulse 112. He rode nine miles this morning, which has not made him spit blood, but he has coughed more after it; and he returns home as usual in the afternoon. His hectic fever is abated; swellings of his legs and hands much diminished; countenance clearer, and he looks better in the face.

May 4th. He has spit no blood to-day after his journey. His body is loose.

The 14th. His looseness is better. He complains of pain and fulness in his breast. Pulse still quick, but rather stronger.

Mittatur sanguis ad uncias octo.

Repetantur remedia, & sumantur sepe in diem balsami glycyrrhizæ nitrati drachmæ duæ.

The

The 25th. He continues to recover.

June 4th. His face is florid, but not near so yellow as it was. He still spits blood at times, but in less quantity. His pulse is slower and stronger. He lives principally on milk, and uses regular exercise on horseback.

Continuentur remedia, & haustus anodynus, sed constent hora somni singulae doses ex Tinctura Thebaica guttis viginti & quinque.

The 15th. His appetite is good; the medicines agree well, particularly the Tinctura Thebaica. His cough and stuffing in his breast are much better. He spits blood in so small a quantity, that he says it is scarce worth mentioning; and he can lie with less difficulty on his right side.

The 25th. He still spits a little blood at times, but is in all respects much better. Bears his journey well and recovers strength. His body is regular with the electuary, which he takes occasionally.

July 6th. He continues better, but complains to-day of loss of appetite.

The

The 20th. Of late he has again spit up some blood with his cough, which he had not done for some time past.—A few days ago an abscess broke in his lungs, and he vomited a large quantity of corruption, which was mixed with blood, and had a very foetid smell. He has likewise forced up by coughing a very considerable quantity of skinny membranous substances, with part of which he has filled an eight ounce phial, and brought it along with him for my inspection. He feels himself materially better, and his appetite is greatly improved.

The 30th.. His cough and spitting have left him. He has had no pain in his breast since he got up the blood, purulent matter, and membranous substances above-mentioned. He can eat and sleep well, and can bear to work in his farm. Pulse 82, regular and tolerably full. He looks clear and well in the face; has no returns of his Asthma; no swelling of his legs, nor any symptoms of hectic fever; and he can lie with equal ease on either side.

He was then dismissed cured, and returned to me again in a few weeks to inform me that he continued well. About a year after I

met him riding to York, and upon inquiry after his health, he told me that he had been free from complaint ever since, except now and then a little cough and shortness of breath from taking fresh cold.

In the case of John Moor of Huby, there was a complication of an asthma, a spitting of blood, and a confirmed pulmonary consumption, in which there was an expectoration of purulent matter, a violent hectic fever, great emaciation, difficulty in lying down, anasarca swellings of his legs and hands, and a very fallow unwholesome appearance in his face, with a circumscribed redness in his cheeks. The only circumstances in his favor were, that he had no natural straitness or deformity in his chest, that his mind was tolerably firm, and his spirits not much dejected. During his stay in the Hospital, I gave particular attention to him, that I might know accurately the state of his case. But as he was only admitted an in-patient on necessity, and as the house was evidently too close for him, I advised him to be made an out-patient, and directed him to attend upon me at the Hospital as often as his strength would permit and he could make it convenient.

Here

Here a critical case presented itself, in which the effects of exercise on horseback were to be carefully attended to. Accordingly I have every day mentioned the effect which his journey of nine miles had upon him. At first it made him spit more blood; then it excited his cough without any spitting of blood; and afterwards it agreed very well with him.

His uneasiness, anxiety, shortness of breath, and difficulty of breathing were always the worst before a discharge of blood; but after it had taken place, he found immediate ease, which is a common occurrence in these cases, and shews a previous congestion of blood in the lungs.

His pulse was always quick from the beginning; but on the 20th of April it rose to 120, which was very alarming.

On the 4th of May a diarrhæa came on, which seemed to relieve him; and, as the anodyne draught was sufficiently astringent, no alteration was made in his medicines.

From this time he recovered fast; and whenever I saw him he generally gave a good account

of himself, much better often than I was willing to credit, for my prognostic concerning the event of his case was very unfavorable. In about three weeks after, an abscess broke suddenly in his lungs, whence issued forth a considerable quantity of blood and matter of a foetid smell, which were followed by the discharge of a great number of skins, such as frequently line the internal surfaces of the air-vessels after inflammation. This discharge proved critical, and he continued afterwards to recover fast every day, and was soon dismissed perfectly cured. I say he continued to recover after that discharge; for it was evident that the beginning of his recovery was many weeks before the breaking of the abscess, as the return of appetite and strength, and the diminution of many alarming symptoms sufficiently evinced. During this time nature in all probability was happily employed in making a separation of the diseased parts from the sound, and in ripening and preparing them for the expulsion which was soon after to take place.

I believe the exercise, which he was obliged to use, was upon the whole of benefit to him, and contributed towards his recovery. The blood evidently proceeded latterly from small vessels,

vessels, which encouraged me to permit him to continue his riding; but had any large vessel been ruptured, that step could not have been taken with safety until the parts had been healed.

Exercise in such cases as these is much recommended by some physicians of eminence, and its utility or even safety is doubted of by others. The late Dr. Gregory was an advocate for it, and Dr. Cullen (in his public Lectures) still recommends a cautious trial of it in many cases of Hæmoptysis. Such great authorities gave me encouragement, and more particularly as I had seen gentle exercise of service in spittings of blood. Indeed the lower kind of people, when under this calamity, are often obliged to use exercise both walking and riding, or even to follow some kind of bodily labor,

But exercise in those disorders should always be tried with great caution, and, where it can be afforded, an easy carriage on a smooth road should be first made use of, and then gentle riding on a quiet easy horse. If a little more blood is at first spit up after exercise, that is not to be regarded; because blood, lodged
in

in the air-vessels, is by this means brought up, which rather relieves than injures. If the patient after a short trial of exercise feels refreshed and stronger, with a little increase of appetite and a diminution of the hectic fever, things are in a favorable way with him, and he is sufficiently encouraged to proceed. This part of practice is attended with much nicety and difficulty, and requires great caution and discernment to pursue it with success; for as it may, if properly applied, do much good, so, if improperly applied, it may do much mischief.*

With regard to the rest of the treatment, we need only just add, that the tinctura thebaica, as an antispasmodic and a sedative, diminished the convulsive contractions of the lungs, lessened the cough, took off irritation, and appeared to be very beneficial. He followed directions concerning regimen, &c. with punctuality, and found great benefit in so doing.

* Dr. George Fordyce's public Lectures on the practice of Physic.

C A S E XXXIII.

The Convulsive Asthma in a child seven weeks old, complicated with a Spasmodic Affection of the throat, treated successfully with Tinctura Thebaica, Laxatives, Cool Regimen, &c. During the cure of the above complaints, he had the Measles and Small-pox.

ROBERT WATSON, seven weeks old, admitted October 13th, 1777, to be an out-patient at the York County-Hospital, has been ill five weeks of his present complaints, which have within these last few days been much worse. He began with feverishness, cough, and stoppage in his breast, succeeded by a difficulty of swallowing and a crowing noise in inspiration, and he has been growing thinner every day. The child now gets his breath at times with the utmost difficulty and anxiety, and crows constantly and violently in inspiration both day and night. His cough is troublesome, and he is not able to suck but with the greatest uneasiness. He has two stools every day. His pulse cannot be felt. The case appearing desperate, the following remedies were ordered in consultation.

Applicetur

Applicetur emplastrum vesicatorium nuchæ.

R. *Tincturæ fuliginis,*

Elixiris paregorici, singulorum, drachmam unam.

Misce. Dosis guttæ sex bis die.

The 16th. His cough is bad. The crowing is shrill, and continues nearly as before, but not quite so constant and severe. Sometimes the crowing is accompanied with a hoarse sound. Sometimes the child sucks easily, and sometimes very ill, according as he is more or less stuffed in his breast. Body regular. The blister answered well but was very painful, and his drops occasion sickness and vomiting.

R. *Mucilaginis cydoniorum drachmam dimidiam,*

Syrupi mororum drachmas duas,

Tincturæ Thebaicæ guttas quinque.

Misce. Dosis cochlearium unum parvum bis die.

The 20th. He is at times better and worse. Coughs and crows much at present, and the sound which is made in inspiration is sometimes shrill and sometimes hoarse. He eats spoon-meat with more ease than he sucks, as he has done all along when his difficulty of breathing

breathing was severe. The anodyne medicine agrees well with him, he sleeps better, but is costive.

Continuetur mistura antispasmodica, & sumatur mistura oleosæ laxantis + cochlearium parvum unum vel duo pro re nata.

The 23d. The child is very weak and thin. His pulse cannot be felt. His crowing is much less; it sometimes stops for half a day, and then returns again. He had an easy stool with the laxative.

November 27th. He eats and sucks better; crows less; sleeps moderately; breathes easier; and his cough is looser. He takes a tea-spoonful and a half of the antispasmodic mixture twice a day, and one tea-spoonful of the laxative mixture every day.

On the 3d of November he had another severe and dangerous relapse of the same complaint. The same medicines were continued, increasing the dose of the anodyne occasionally; and the symptoms were much relieved on the 26th. — On the 4th of December his disorder returned again, but with less violence; and in a few

X x

days

† Vide p. 245.

days he began to recover.—On the 1st of January the anodyne was omitted for three nights, and he slept much worse, was weaker, coughed more, and breathed with greater difficulty.—Afterwards he continued to recover fast, until on the 26th the measles began to appear. The same remedies were given with success.—On the 12th of February, the dose of the anodyne was increased to three tea-spoonfuls at night and two in the morning. His mother observed that during the cure the operation of the anodyne was not so successful when he was very feverish, as when he was less so. The laxative answered well.—On the 25th of May, the child had the small-pox of a distinct kind, and, by the assistance of the same remedies, he got well through them. He had afterwards two gentle doses of physic *, and was dismissed free from complaint on the 18th of June.

This child was only seven weeks old when I first saw him, and he had been ill five weeks. The symptoms of his disease were extremely severe, and the case appeared desperate. Here was a manifest complication of an Asthma, with a spasmodic affection of the larynx. That the

* *Hausius Senæ pro infantibus.*

the lungs were diseased was evident from the cough, sudden difficulties of breathing, stuffing in the breast and rising of phlegm into the throat. During the cure likewise, his breathing was sometimes very difficult and laborious, when he made no crowing noise in inspiration, nor had any signs of spasm in the larynx. And that the larynx was affected is equally evident from the changes which took place in the sound of his voice, being sometimes hoarse and sometimes shrill, attended with a crowing noise in inspiration. The fever and great anxiety, under which he labored, were symptoms common to both complaints.

How far previous inflammation of the lungs and larynx had laid the foundation for the above complicated disease, is difficult to determine. But it is highly probable that an obstruction had taken place in the air-vessels, in consequence of an inflammation of those parts, which had been at first overlooked and neglected. The efforts of infants in many cases are very weak and languid, and their greatest signs of distress are often rather negative than positive. Whenever an infant is awake, and yet inattentive to objects around it; when it refuses the breast; when its eyes move heavily; when its

countenance is languid; and it neither cries nor stirs its limbs in its usual manner, the case, be it what it may, is attended with danger. But if, to the above feverish symptoms, we add a troublesome cough and quick difficult respiration, the lungs, as dissections have fully convinced me, are inflamed.

Now the above symptoms, though alarming in themselves, may not demonstrate the seat and nature of the disease, nor the necessity of early and repeated bleedings to friends and attendants; and consequently bleeding, which is the best remedy, may be neglected, and the poor infant left to struggle on by the mere efforts of nature, through the great miseries of a highly inflammatory disease.

With regard to the seat of the complaint we may further add, that it is no uncommon thing for inflammation to affect both the lungs and larynx at the same time. I once was present with a Physician at the examination of the body of a woman, who died of an asthma and consumption three weeks after delivery, whose breathing, both before and after the birth of the child, was extremely difficult, attended with a violent wheezing; and we found not
only

only several large ulcers in the lungs, but a very considerable ulcer at the bottom of the larynx. Other dissections, likewise, of a similar nature are related by authors.

Having given this conjecture concerning the first rise of the obstruction in the lungs and larynx, I must now observe that that obstruction was evidently accompanied with a spasmodic affection of those parts, which constituted the disease in that state in which I first saw it. Bleeding then was out of the question; for the child was very pale, weak, and emaciated, and his pulse could not be felt. Desperate, however, as the case appeared, it was highly probable that nothing but antispasmodics could afford relief. Accordingly a blister and an antispasmodic mixture was ordered; but as the last occasioned sickness, it was altered for another of a similar nature, still preserving the same indication of cure. As the child was afterwards coughive, a laxative pectoral syrup was given, in which there was castor oil.

By those two medicines, and those two alone, increased in their doses as circumstances required, and aided by fresh air and a proper regimen, this poor infant struggled through, not
only

only its first very alarming complaint; but likewise the measles and small-pox. Those remedies suited each of the above-mentioned disorders, and, by the continuance of them, the spasms of the lungs and larynx were gradually lessened and removed, and the violent irritation, necessarily attendant on the measles and small-pox, was happily diminished.

The cool regimen during those complaints was enjoined and strictly followed. But I am sorry to say from experience, that thousands of children, even in the present improved state of physic, are lost both in the measles and small-pox, from the ignorance of parents and inattention of servants. The cool regimen is often ordered where it is never applied, and the unhappy patient falls a sacrifice to the neglect of it. To have the cool regimen applied successfully in those cases, the children should be very closely attended to both day and night. By a proper management of fires, doors, and windows, the room should always be kept cool and the air pure. In the night, the state of the bed should be carefully observed; for if it be too soft, and there be too much covering, the consequences may be dangerous. Indeed if a child be too hot at nights during the eruptive fever

fever of the small-pox, that single error may bring out a very copious eruption of the confluent kind, and afterwards defeat every salutary end of the cool regimen. Whenever the practitioner does not, during the eruptive fever, attend both morning and evening to see the proper execution of his own directions, parents and friends are seldom able to find out a proper medium between the two extremes of heat and cold, both of which are found so very pernicious. A strong plethoric child, in which the fever runs high, is much sooner heated to excess than a pale thin weakly child. A greater degree of cold therefore is adviseable in the first case than in the last; and this is one principal reason why the most healthful children often die in the small-pox and measles, when the weak and delicate, in whom it is more difficult to excite an inflammatory fever, recover well,

In short, children, particularly at the beginning of those diseases, should have a mattress above the feather-bed, and only that quantity of bedclothes should be made use of, which is suitable to the season, be it a single sheet, a blanket, two blankets, &c. just sufficient to maintain a moderate uniform degree of warmth

in

in the body and limbs. If indeed, during this regimen, the feet of the child should feel a little cooler than the other parts, I think it of no consequence, having never observed any ill to arise from it, although I have in many cases permitted it to pass without alteration. On the contrary, an anxious attempt to keep the feet warm, has frequently done hurt, by over-heating the face and the rest of the body.

With regard to the internal obstructions which took place in the lungs and larynx of this child, it was the business of Nature to remove them; and her operations, cautiously assisted by art, were successful. Neither of the medicines ordered could have been omitted; but the antispasmodic mixture, tho' rather astringent, was of the highest utility, for when the child was without it a few nights, it was evidently worse, and this happened several times during the cure. The dose was gradually increased till he took the whole mixture in a day, consisting of five drops of tinctura thebaica. This child was admitted a patient on the 13th of October, and he was dismissed free from complaint on the 18th of June, during which time he had gone thro' such a series of sufferings as few children are exposed to, or when exposed to, have strength to survive.

I must at the same time take notice of the great care and tenderness of her mother, and her readiness to follow directions, such as avoiding tight bandages, impure air, too great heat, spirituous liquors, improper food, &c. without which all our endeavors to relieve him would have been fruitless, and death the inevitable consequence. Let the event of this case afford encouragement to those parents and practitioners, who are apt to despond and give up children too hastily; for with proper assistance they will often recover from the most violent disorders of the lungs, although it must in general be admitted that none are more fatal.

This complicated malady did not leave the child on a sudden, but was repeatedly better and worse, till by perseverance it was gradually and intirely removed. Sometimes the spasm was more in the lungs and less in the throat, and then he seemed very much stuffed in his breast, but made little or no crowing noise in inspiration. Several times I had given up all hopes of his recovery, and expected daily to hear of his death; and as often I had the satisfaction of being disappointed in that expectation. It was a very fortunate circumstance that the anodyne

agreed so well with him; and we began the use of it cautiously, that we might not have any prejudices raised against it, in consequence of too severe an operation at first.

It is worth remarking, that the child sometimes could eat better than he could suck, and sometimes would suck when he would not eat. The reason of this is obvious; for when the spasm of the lungs and larynx was most violent, the child could not suck, and then the stuffing in his breast was always severe. At those times, therefore, spoon-meat made very light and thin, and given in small quantities, became necessary. But when the child found that his respiration was freer, and that he was able to suck (for sucking requires a considerable exertion to make a sufficient vacuum within the mouth) he always preferred his mother's milk to every other kind of nutriment, and particularly whenever he was afflicted with any feverish symptoms.

We shall conclude this case with observing, that the blister on his back gave great uneasiness, a circumstance worthy of attention. The imminent danger in the present case, and the obstinacy and duration of the symptoms perfectly

perfectly justified the practice which was adopted; but as I have many times seen them for several days together produce violent pain and anxiety, great caution is requisite, not to apply them too early in the disease, nor when symptoms of irritation run high, which are easily discoverable by frequent crying, great anxiety and restlessness.

C A S E XXXIV.

*The Convulsive Asthma, complicated with a pulmonary consumption, succeeding an inflammation of the lungs, treated successfully, by Tinctura Thebaica, Cordial Mixtures, Laxatives, Country Air, &c. **

CHRISTOPHER NOBLE, aged 41,
a gardener by trade, a free liver, of an
inflammatory habit, admitted a patient at the
York County-Hospital, January 4, 1781, has
Y y 2 been

* The following note contains a brief but interesting account of a preceding illness which Christopher Noble had early in the spring of 1780.

About twelve months ago this man had an inflammation of his lungs and great difficulty of breathing, with a most violent painful cough.—When the fever and inflammation of the lungs was abated, a cough, stuffing in his breast, and sudden
attacks

been severely afflicted with a disorder in his lungs for seven weeks past. He has at present a violent cough, with a most obstinate stuffing in his breast and difficulty of breathing, which at times are so severe that he is scarce able to speak. His spirits are extremely low and depressed; his body greatly emaciated. He is very weak and feverish, subject to cold and hot fits; his face looks thin and black; his pulse is small and feeble; body regular; appetite bad; sleep much disturbed by his cough and difficulty of breathing; and what he spits up

attacks of difficult breathing remained very obstinate and violent, so that, when he endeavored to walk a little, he was often obliged to stop for want of breath, and (to use his own expression) felt as if he were going to drop down.

He had, during the same illness, frequent returns of violent pain in his stomach and bowels, and blood often came away in his stools. If he took any thing that was warm, it always increased the pain in his belly. Sometimes he was troubled with a violent pain in his back, and made bloody urine, supposed to arise from the gravel. He frequently had too a gnawing pain and trembling at the pit of his stomach, which came upon him several times in a day. Towards the latter end of his disorder, his legs swelled in an evening and he was reduced to extreme weakness.

Those complaints were preceded by a dry scabby itching eruption on both his hands a little above the thumb, which gradually disappeared, as soon as he was attacked with the inflammation of his lungs and asthmatical disorder.

During

up has all the evident marks of purulent matter.

Capiat Tincturæ Thebaicæ guttas quindecim omni nocte hora somni,

R. Emuls. comm. sine saccharo libram unam,

Mannæ optimæ unciam unam & dimidiam.

Sumat uncias tres vel quatuor ter die.

The 8th. He has had four stools with the opening emulsion, and his nights are rather easier.

Capiat Tincturæ Thebaicæ guttas viginti omni nocte hora somni;—mistræ cardiacæ unciam unam & dimidiam ter die;—& emulsionis solutiæ uncias tres pro re nata.

The

During the course of this illness he was bled three times; and his body was kept open with castor oil, infusions of senna, Epsom salts, &c. He had likewise two blisters, mucilaginous decoctions, tinctura thebaica, glisters, emetics, flowers of zinc, aloetic pills, decoctions of the woods, and an issue in his arm, along with a milk and vegetable diet, pure air and exercise on horseback; by which means he recovered from a very tedious and dangerous illness.

When he began to grow better in his internal complaints, the eruption returned again upon the same part of his hands, which was scabbed, swelled, and pit when pressed upon. When he was warm in bed too, his skin frequently itched much and small hardish red tumours (which he called lumps) came out, but disappeared again in the morning. By means of regular exercise, pure air, a decoction of the woods and gentle laxatives, those symptoms gradually left him in a few weeks, and he was afterwards dismissed free from complaint.

The 11th. He complains that his cough and difficulty of breathing are still very severe, and attended with pain in his breast. His pulse is small, weak, and quick. Other symptoms nearly as before. His body is regular, and his nights somewhat easier with the anodyne draught.

Repetatur ut antea mistura cardiaca & Tinctura Thebaica.

*Sumat tincturæ laxantis * uncias duas, vel tres pro re nata.*

The 15th. His difficulty of breathing still continues, with pain in his breast, which is increased by his cough.

Repetantur remedia, sed constant singulæ doses Tincturæ Thebaicæ ex guttis viginti & quinque vel triginta.

The 18th. The cough, expectoration of purulent matter †, difficulty of breathing, hectic fever, &c. are all very bad, with greater bodily weakness and wasting of his flesh.

The

* R. Tincturæ sacæ,
Tincturæ Rhei vinosæ, utriusque, uncias tres.

† I shewed the matter spit up to two or three Gentlemen of the Faculty, of great experience and observation, who were clearly of the same opinion.

The 22d. The symptoms continue to increase.

The 29th. The symptoms continue to increase; and he is now so extremely weak, that he is obliged almost constantly to keep his bed, or else to lie down on a squab.

February 1st. All the symptoms in his breast are as bad as ever. He complains too at present of a pain in his legs and thighs, and a stitch in his side.

Repetantur remedia; & applicetur emplastrum vesicatorium lateri dolenti.

The 5th. The symptoms continue very severe.

The 13th. He says that a little small rum and milk relieves him. His appetite is rather improved; he sleeps better, and goes out into the air every day. Body regular.

The 19th. He has a violent weakness in his hands, a pain in his wrists, and a stitch in his side,

The

The 26th. What he spits is still in large quantity, and has evidently the appearance of pus. He walks frequently in the open air, and thinks himself rather stronger, though he complains of a pain in his ankles and knees, and frequently falls down. Appetite better; body regular; but he is much troubled with wind in his stomach and bowels.

March 1st. He is very weak, and greatly distressed with pains in his limbs.

The 8th. He has severe pains in his ankles, and in several other parts.

The 12th. He spits less. Cough and difficulty of breathing somewhat abated. He is a little stronger, but still totters when he walks.

The 22d. He spits less purulent matter, and is materially better in his difficulty of breathing and other complaints of his breast. He has severe pains in his ankles.

April 2d. He has severe pains in his thighs, knees, and ankles, which the coldness of the weather increases. He has been in the country five days; looks better; and what he spits is
in

in less quantity, and has only the appearance of common phlegm, white, transparent, and viscid.

The 9th. His spitting continues, and he gets up some phlegm, but little or no purulent matter. Body regular.—Let him omit gradually the use of the Tinctura Thebaica.

The 12th. He has still pains in his joints.

The 23d. His health is much better, appetite improved, pulse stronger, and he looks considerably fuller in the face. He has been in the country a week, and will return again tomorrow. He has a pain in his ankles, fingers, and thumbs.

May 7. The weather is cold and unseasonable. Thermometer 42. He has got some fresh cold. His fever, pain in his breast, and difficulty of breathing are much increased, and his cough is very troublesome both day and night.

Mittatur sanguis ad uncias octo.

Repetatur hora somni haustus anodynus, & statim mane haustus senæ purgans.

The 10th. He is not able to attend at the Hospital to-day. He has had, since the last report, a violent pain in his breast, stomach, and bowels, which the bleeding relieved. The opening draught gave him several stools.

Mittatur sanguis ad uncias octo.

Repetatur haustus anodynus, & sumatur mane haustus senæ purgans.

The 14th. He finds himself materially better, and is able to attend at the Hospital this morning, which he has not done for six days past, being obliged to keep his bed. His cough and difficulty of breathing are abated, and expectoration easier. The physic answered well. Pulse moderate.

Continuetur haustus anodynus.

R. Oxymellis scillitici uncias duas;

Aceti scillitici uncias tres. Misce.

Sumat ex quovis vehiculo drachmas tres ter die.

The 21st and 24th. He vomited his squill medicine once. His cough and difficulty of breathing are better. He has still a pain in his right finger and thumb.

The

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The 31st. He has at present a pain in his ankles and feet. He walked three miles the other day, but was much fatigued with it. His difficulty of breathing is better, and he has little or no cough or spitting.

June 11th. He finds himself much recovered. His pulse is good; he is stronger, and looks fuller in the face.—As he grew fuller and more plethoric about the 7th of May before the last relapse, I desired him to lower his diet, and particularly to be very moderate in the use of spirituous liquors.

The 18th. He has some pain and swelling in his ankles, and is feverish.

Continuentur remedia, & repetatur cras mane haustus senæ purgans.

The 28th. The physic answered well; the pain and swelling of his legs are much better; and he is not feverish. The country agrees with him.

July 2d. He looks well, eats well, and sleeps well. His cough and spitting are intirely removed, except that in a morning he gets up a small quantity of clear phlegm. Pulse natural.

Body regular. He weeded in his garden yesterday for four hours, and felt no inconvenience from it, but a little pain and stiffness in his hams and ankles.—In a few days after he was dismissed cured.

The case of Christopher Noble is one, which presents to us a striking example of a disorder of the lungs, that carries thousands every day to the grave—an asthma complicated with a pulmonary consumption in which there was an ulcer of the lungs*. His sudden fits of difficult breathing at times were so severe, that he was scarce able to speak; and he had an obstinate cough, with a continual stuffing in his breast. His spirits were low and funk; his flesh very greatly wasted; his face thin and black; pulse quick and weak; appetite bad; along with restless nights, a strong hectic fever, and an expectoration of purulent matter. The matter spit up was in very great quantity, and of a very bad color,—some parts of it opaque, yellow, and considerably less tenacious than the rest,—having all the evident external marks of purulency. This fact is still further confirmed, when we consider that his disorder was preceded

* Vide Morgagni de Caus. et Sed. Morb.

preceded by a violent inflammation of his lungs, in which early bleedings had been neglected. An abscess and ulcer of the diseased part was therefore a natural consequence of the inflammation; for it is well known that in this disorder the neglect of bleeding for two or three days, is often immediately fatal by gangrene or an effusion of red blood into the cellular membrane of the lungs, or else ends in an abscess and pulmonary consumption, complicated sometimes with an asthma, as happened in the case before us.

When I saw him, the most proper time for administering relief was evidently past, and therefore I will be honest enough to confess, that I had little or no hopes of doing any thing more for him than palliating particular symptoms, and rendering his departure out of life somewhat more easy and composed. For this purpose I had recourse to the Tinctura Thebaica, as being, if it agreed with his constitution, the most likely remedy to give him ease; and more particularly, as I had seen some very desperate cases recover during the use of it*.

Fortunately

* An eminent Surgeon informed me that opium is given with great success in the cure of external ulcers, which fact tends to confirm the opinion here adopted of its extraordinary utility in some cases of pulmonary consumptions.

Fortunately the medicine (which is not always the case) agreed well with him, quieted his cough, procured him better nights, lessened the spasms of his lungs, and gave him immediate ease. At the same time, as he was extremely low, weak, and emaciated, he had a cordial mixture of which he was occasionally to take a few spoonfuls when sick or faint. To obviate costiveness which the tinctura thebaica might induce, he always had by him a gentle laxative. I recommended to him likewise a pure air, a temperate room, a milk and vegetable diet, and permitted him now and then to take a small quantity of fresh animal food when his stomach could bear it; for this appeared to me to be one of those cases of asthma and consumption which required a little better support, and in which a very low diet would have been hurtful. I was well acquainted too with his constitution, and recollected the extraordinary relief obtained in a preceding illness by a critical eruption on his hands*, and therefore was not altogether without expectation of some other salutary effort of nature to relieve him. He had likewise taken at times a little weak rum and milk, and as it agreed with him and he thought it of service to him, I did not forbid it.

* Vide note at page 355.

The disorder in the mean-time made rapid advances, and whenever his wife attended at the Hospital, or I saw him at his own house, he was worse and worse, weaker and more emaciated, till at last he appeared to be in the very last stage of a deep consumption, and, not able to support his own weight, he was continually laid in an horizontal posture. Notwithstanding this deplorable state, he found ease and temporary relief from his medicines, and was very desirous of continuing them; and as I knew of no better, I readily complied with his request.

On the first of February, at a moment when nothing but death was daily expected, he began to complain much of pains in his legs and thighs, and a severe stitch in his side. His wife afterwards told me, that "he was better in his breast and in himself", meaning by the last phrase, that he had some return of appetite, and that the hectic fever was less. Those pains continued, and moved from place to place, and nothing was done, either by fomentation or poultice, to divert the course of nature, or to disturb her salutary operations. The same mild restorative diet, cordial mixture, and anodyne draught (the dose of the last being gradually increased)

increased) were continued, hoping still to support the patient at this critical juncture; for nothing could be more favorable than an attack upon the joints, and a translocation of the disease to the extreme parts.

From this time he began to recover, and all the symptoms of his asthma and consumption gradually diminished. His strength returned, he could eat a little food with an appetite, his countenance improved, his blood-vessels filled and he gained flesh.—During his recovery he often walked in the open air, from which he found great relief. He afterwards went into the country by my direction, and now and then attended at the Hospital. When he did not attend, his wife came for his medicines, which were forwarded to him. About this time I advised him to leave off by degrees the *tinctura thebaica* and cordial mixture, as there was then no occasion for the constant use of them.

Thus he continued to recover till the 7th of May; when, contrary to my express directions, he had lived too freely, and either from plethora, from cold, or from both, he complained again of a fever, cough, and difficulty of breathing,

breathing, which symptoms were soon followed by a violent pain in his breast, and in the region of his stomach, along with colic pains in his bowels. In this manner the inflammation of his lungs returned severely upon him; but it did not come unexpectedly; for I had forewarned him of it, and desired that, if he had any fresh attack of inflammation, I might be sent for immediately. From observation in other cases, I had remarked, that it was very unsafe to fill the blood-vessels too quickly after an asthma and consumption, or any other violent complaint of the lungs, as nothing favors relapses more than plethora, and especially when there is a strong tendency in the constitution to local inflammation. I have seen many cases of pulmonary complaints of an inflammatory nature, into which patients have relapsed, as soon as they began to recover their former good looks and to shew signs of plethora.

To remove this fresh attack of inflammation, Christopher Noble was immediately bled, and the bleeding was afterwards repeated. His body at the same time was kept open by gentle laxatives; for as he was subject to costiveness, colic pains, and bloody stools, the utmost caution was requisite to the state of his bowels.

By those remedies thus timely applied, along with a proper regimen, the violence of the internal inflammation was soon removed. Nature freed from her oppressive load, made another effort to relieve him; the pains and swellings of his joints returned; and, with a more moderate diet* and the treatment mentioned in the case, he was soon after restored to perfect health.

From this man's recovery we are taught never to despair in asthmatical and consumptive disorders, but to believe that while there is life there is hope; and tho' medicine alone cannot effect a cure, yet nature, assisted by proper means, may do great things for us, even in cases apparently desperate.

We learn too that great caution is requisite in the removal of pains in the joints, which are often critical and of the greatest service to the constitution, freeing it from severe internal complaints. Daily experience convinces us of the

* When he was very low and weak, I recommended a restorative diet; but when he grew better, he carried my advice to excess, began to be plethoric, and to look red in the face and full of blood. At this period of his disorder, therefore, I was obliged to alter my first directions, and to desire him to lower his diet.

the truth of this assertion, and too often we see phrensies, inflammations of the lungs, violent pains and palpitations of the heart, and excruciating torments in the bowels, brought on from the hasty repulsion of pain and inflammation in the joints and external parts*. In these cases great attention should be had to the strength and condition of the patient's constitution, and to the previous disorders to which he may have been subject; and, if any fever or internal chronical complaint be easier since the commencement of the external pains†, time
3 A 2 should

* We are likewise taught by his former illness, (vide note page 355 at the beginning of this case) how very cautious we should be in using externally any repellent applications in cutaneous eruptions, at least till we are perfectly sure of their nature and tendency, and, by an efficacious course of medicine, have got the constitution into a proper state. I have in several instances seen the most dreadful consequences arise from the imprudent repulsion of cutaneous eruptions, such as fevers, palsies, apoplexies, inflammations of the lungs, and dysenteries with severe pain and bloody stools.

† In the case of Christopher Noble, the pains in the joints and muscular parts seemed to be what Physicians have called a rheumatic gout, (vide Sauvages Nosol. vol. 2. page 21.) or a complication of gout and rheumatism. Practitioners in medicine have generally been much more upon their guard in the first than in the latter disease; but I am fully convinced from many cases distinctly marked, that equal caution is sometimes requisite in the rheumatism, which by improper treatment may easily be driven from external and fixt on internal parts.

should be allowed, and all repelling applications studiously avoided, as being of a most dangerous tendency.

CASE XXXV.

The Convulsive Asthma, complicated with a spitting of blood, cured by Musk, Blood-letting, &c.

MR. —, aged 30, February 6, 1784, subject to an asthma, has a bad cough, hoarseness, difficulty of breathing, and pain in his breast. He spits up much phlegm, particularly at nights, and it is mixt with blood. He has been ill about a month of his present complaint, which was preceded by a violent pain in his head. His difficulty of breathing, for about ten days past, has been more severe than usual, especially in the afternoon and the beginning of the night, so that he was then scarce able to speak. The quantity of blood spit up is sometimes considerable, attended with a troublesome cough. His body swells with wind, and he is costive. His pulse is quick, weak, and irregular, and he is feverish at times. A milk-diet was advised along with the following remedies.

Mittatur

Mittatur sanguis ad uncias octo.
Mistura spermatis ceti cochlearia duo vel tria ter
die; — haustus anodynus hora somni; — Et mistura
salis cathartici amari cras mane sumatur.

The 9th. His blood is fizy. The physick operated gently. The spitting of blood is much abated. Other symptoms continue as before, and his asthmatic fits are severe.

Omittatur mistura spermatis ceti Et haustus anodynus.

R. Moschi puri pulverati grana octo,
Mucilaginis gummi Arabici semi-drachmam,
Aquæ fontane drachmas decem,
Aquæ cinnamomi spirituosæ sesqui-drachmam,
Sacchari albi grana quindecim.

Misce secundum artem, Et fiat haustus ter die sumendus.

The 11th. He coughed much last night, and was sick with his muck-draught. Body bound; appetite moderate; pulse not weak. He has little or no fever. Other symptoms as before.

Repetatur haustus antispasmodicus, Et sumatur pro re nata electarii solutivi drachma una hora somni.

The

The 16th. His cough is better, expectoration easier and without any mixture of blood, and his asthmatic fits much abated. He is not sick with his medicine. His body is regular with the electuary, a tea-spoonful of which taken every night gives him an easy stool.

Repetatur haustus antispasmodicus, sed constant singulae doses ex moschi puri granis duodecim.

The 20th. A few days ago he was bled again for a pain in his breast, and had a large issue set in the back of his neck. He afterwards continued to take the remedies for three weeks longer, during which time he had several returns of his Asthma, but they were gradually less and less, and on the 9th of March he was perfectly free from complaint.

There is no doubt but that musk, when it is obtained pure and unadulterated, and the patient is able to take it, is an useful antispasmodic in the convulsive Asthma. But as it is sold at a very high price, it is often much adulterated, and is with difficulty procured genuine. The taste and smell of it likewise is very offensive to many asthmatic patients, in whom

whom the nervous system is irritable. From these causes we are frequently disappointed in our expectations concerning its efficacy. In order to render it the most useful, it should be given in a dose of ten, fifteen, or twenty grains. In the case before us we could not increase the quantity of the musk materially, as the patient was sick with the dose that was at first prescribed.

C A S E XXXVI.

*The Convulsive Asthma, cured by Musk, Laxatives,
&c.*

MRS. — aged 31, March 10, 1784, has been at times afflicted with an Asthma for near three years. She has had a bad cold for a month past, and her Asthma for several nights has been very severe. The fit comes on about twelve or one o'clock at night, and continues violent for two or three hours, attended with wheezing and difficulty in lying down. When the fit abates she gets up some tough, thick, yellow phlegm, and then her breathing becomes free. She looks pale and thin. Body bound. Pulse low. Great thirst, parti-

particularly at nights. She has had no menses for seven weeks past, but was regular before. She is much troubled with wind and swelling of her stomach and bowels. Her complaint often comes on before rain, and is worse in cold weather than warm.

Applicetur emplastrum vesicatorium nuchæ.

Capiat Julepi Moschi uncias duas ter die; & pro re nata hora somni pilulas aloeticas duas vel tres, cum olei olivarum uncia dimidia.

The 17th. She has one or two stools a day. Her cough and breathing are somewhat better. Let her have an issue set in her thigh.

Continuentur medicamenta, sed augeatur gradatim dosi julepi moschi.

The 22d. She takes three ounces and a half of her musk julep three times a day, and it makes her very sick in a morning fasting. She has little or no return of her difficulty of breathing at nights, and she can now bear to walk out and use exercise better than she did; but quick walking is still too much for her. She expectorates freely with her cough, and the phlegm is clearer and thinner.

Sumat haustum emeticum vespere.

R. Moschi

*R. Moschi puri grana sex,
 Conservæ cynosbati drachmam unam,
 Syrupi balsamici, quantum satis.
 Misce, fiat bolus ter die sumendus.*

April 6. The vomit relieved her. Her body is regular. Menses present. Medicines agree, and she finds herself much better. Her cough and spitting is almost gone, her breathing is easy, and she sleeps well at nights. She recovers strength, and her looks are much improved.

Hatistis ex decocti corticis Peruviani uncis duabus, & aque cinnamomi spirituosæ drachmis duabus ter die sumatur.

The 11th. She has no complaint.

C A S E XXXVII.

The Convulsive Asthma, complicated with Hysterical Fits and Obstruction of the menses, cured by Castor, Tinctura Thebaica, Blood-letting, &c.

ANN WOOD, a servant, aged 25, admitted at the York County-Hospital, February 12, 1781, had the measles last summer, and has never recovered her health since. She complains of a cough and difficulty of breathing,

but the last is far the worst and most troublesome symptom. It comes on by fits two or three times a day, and then she is unable to stir. She breathes with tolerable ease at present, but her asthma was very bad yesterday. Her complexion is florid, habit rather full, and she is subject to hysteric fits. At times too she has an universal puffy swelling of her flesh, particularly of her hands and feet towards night. Her stomach is often painful and much distended with wind. Her body is bound, her nights disturbed, and she has only had her menses twice since she had the measles.

*Conferui optimi pulveris grana decem,
 Conservæ cynosbati scrupulos duos.
 Syrupo balsamico fiat bolus ter die sumendus.*

*Decocti mucilaginosi cochlearia tres ter die,—
 haustus anodynus heræ somni,—Et mistura purgantis
 uncia quatuor cras mane sumantur.*

The 15th. She had two stools with her physic; was sick with her bolus; and has a pain at her stomach to-day. Since the last report, she has had a difficulty of breathing every night from twelve o'clock till two, at which time it began to abate, and she was quite free from it at four.

Her

Her cough is better, and she gets up a little phlegm, particularly in a morning. She had an hysterie fit yesterday, in which she breathed very short and with great difficulty.

Fiat venesectio ad uncias octo.

Repetantur mistura macilaginosa, haustus purgans, & haustus anodynus ut antea,—& bolus e castoreo ex pulveris castorei granis septem pro dosi.

The 19th. Her cough and difficulty of breathing are somewhat better; she is not sick with her medicines; her physic answered, and the bleeding relieved her. She has had no more hysterie fits, and has much better nights, but is troubled with a bad head-ach.

Continuentur mistura & haustus anodynus,—& repetatur bolus, sed consent singule doses ex pulveris castorei granis decem.

The 22d. Her difficulty of breathing is much better, and she sleeps well in the night. She has now and then a slight fit of her asthma in the day-time. Her head-ach continues, and she is sick with the bolus, but has no return of her hysterie fits. Her body is regular, and the swellings of her hands and feet, &c. are much diminished.

Capiat decocti Corticis Peruviani uncias duas ter die.—Omittantur alia remedia.

The 26th. She is much troubled with head-ach and sickness; but has no stuffing at her breast nor difficulty of breathing; and her medicines agree well with her.

March 1st. Her head ach and sickness are better.

The 12th. No complaint. Let her be dismissed.

The symptoms, which this patient labored under in her complicated state of an asthma, hysteric fits, obstruction of the menses, and stomach complaints, with puffy swellings at times in most parts of her body, constitute a disease, the appearance of which is not unfrequent among young women of relaxed irritable habits. The measles in this case had, from the neglect of bleeding, left the lungs very much obstructed, which had probably laid the foundation of her disorder.

It is observable in the case of Ann Wood, that she had a cough, but that the difficulty of breathing was far the most troublesome and distressing symptom, which is a very common occurrence in this complaint. The fits of her asthma re-
 curred

curred several times in twenty-four hours, and, though short, were very severe. I gave this woman two antispasmodic remedies, the powder of Castor and Tinctura Thebaica, which seemed to have a good effect, not only in taking off the complaint of the lungs, but also in removing the pain of her stomach and hysterical symptoms. The universal swellings, which were cedematous, arose from the obstructed respiration, and irregularity of the menses; but indeed either cause alone is often sufficient to induce it. As soon as she began to recover, that symptom disappeared along with the rest. She grew at last very tired of the castor bolus; and as she had given it a fair trial and it seemed to have had a good effect, I ordered a decoction of bark to strengthen her constitution and compleat the cure. Castor, though it was of service to this patient, is not a favorite medicine of mine in the asthma; for it has often disappointed me, and patients are apt to nauseate the taste and smell of it so much, that they are with difficulty persuaded to continue it for a sufficient length of time. Besides, on account of the great price it bears, it is equally as liable as musk to undergo every possible degree of adulteration.

CASE

C A S E XXXVIII.

The Convulsive Asthma, complicated with the Gout, cured by Camphor Julep, Laxatives, &c.

MICHAEL BLADES, aged 52, admitted a patient at the York County Hospital, January 13, 1783, has a very bad cough, which is preceded by a severe fit of difficult breathing, particularly when he first wakes in a morning. He has been a hard drinker. His complexion is pale and dark. He had the gout in his hands and feet about a week ago, but as that left him, his cough and other pulmonary complaints grew worse. He has been subject to the gout for many years, which generally attacks his great toes and wrists of his hands, producing pain, swelling, and redness. Pulse moderate, body regular, appetite but indifferent. He has frequently rubbed his joints, when in the gout, with a mixture of several oils. This last time that the gout was in his hands and feet, he rubbed the parts affected with those oils before his lungs became diseased.

Loboch sanantis cochlearium unum sæpe in diem, — thei pulveris & magnesia alba, utriusque, scrupulus unus pro re nata, — & Julepi e Camphora uncia una & dimidia bis die capiatur.

The

The 16th. His difficulty of breathing is somewhat easier; cough less violent; and he spits up more phlegm. The powder answered very well in opening his body, and he was not sick with his Camphor Julep. He has had no return of the gouty pains in his joints.

Repetantur medicamenta, sed augeatur dosiſ Julepi e Camphora ad uncias duas bis die.

The 19th. He continues to recover.

Augeatur doſiſ Julepi e Camphora ad uncias tres vel quatuor.

February 3d. He is free from complaint. He has latterly taken four ounces of the camphor julep twice a day, and found it had a better effect in a larger doſe.

This is a caſe which one frequently meets with in practice,—the gout leaving the extremities, falling upon the lungs, and producing ſpafms in the air-veſſels with pulmonary obſtructions. Being a hard drinker, he was conſequently expoſed to one powerful cauſe of the gout, eſpecially in ſuch a conſtitution as his, which has ſeveral ſtriking marks of the gouty temperament. He is of a warm paſſionate temper,

temper, with a coarse-grained skin and dark complexion. He had by him a favorite prescription of five different oils, with which he was accustomed to rub his hands when they were swelled and inflamed—a practice capable of inducing the very worst effects. During this last attack, when the gout was in his feet, he had recourse to his oils, which drove it immediately to his lungs, and produced the above-mentioned dangerous symptoms. Being too weak to bear bleeding, I prescribed for him the Camphor Julep and an occasional laxative. As the gout had left his extremities, and he was subject to violent spasms and colic pains in his stomach and bowels, it became very necessary to keep his body open with a view to prevent any attack of the gout upon those parts. The Camphor Julep, particularly when given in a larger dose, had in this case a better effect than I ever remember to have observed before. It is a very nauseous medicine, and few patients can be persuaded to take it in proper quantity for a sufficient length of time. For this reason many prescribe camphor in the form of pills in preference to any other form; being cautious only to make them of a nature readily soluble in the stomach, that they may not pass undissolved through the alimentary canal. Given in too large a dose,

dose, it is well known that camphor is possessed of deleterious powers, which have been productive of dangerous consequences.

CASE XXXIX.

The Convulsive Asthma, cured by Ether, &c.

MRS. —, aged 53, December 24, 1777, has had a violent pain in her stomach and bowels, which are often much distended with wind. Her constitution is weak, pulse low, and her flesh considerably wasted. Those complaints were soon relieved by gentle laxatives, tinctura thebaica, and a ~~dark~~ mark. Afterwards she was gradually seized with a cough and spitting, along with a stitch in her side and sudden attacks of shortness of breath, which last symptom continued for an hour or longer, and was accompanied with the sensation of a great weight laid upon her breast. For the removal of those complaints, she took gentle laxatives, tinctura thebaica, and camphor julep. These remedies not relieving her asthmatic fits, they were changed on the 24th of January for the Vitriolic Ether, eighty or ninety drops of which were taken in a little water three times a day.

February 4th. Her difficulty of breathing is much relieved; body regular; cough still troublesome, but rather less so than it was; expectoration easier.

The 7th. Her cough is better as well as all the other symptoms.

The 15th. Her difficulty of breathing is entirely removed, and she has little or no cough remaining.

Ether is one of those medicines that sometimes gives sudden and unexpected relief in slight cases of the asthma, but often disagrees with patients, and disappoints us in long and dangerous cases, for which reason it is not much to be depended upon.

C A S E XL.

The Convulsive Asthma, cured by Asafetida, &c.

MRS. —, aged 23, January 5, 1782, has an Asthma attended with a troublesome cough, and a copious expectoration of thick viscid phlegm. She is thin and pale; her body is either loose or bound, but seldom regular;

gular; and she is subject to severe attacks of the colic which bring on fainting fits. Her pulse is weak and small; her legs swell towards evening; her breathing during the asthmatic fit (which comes on suddenly, but at no stated times) is very difficult, and continues so for several hours.

Capiat tincturæ rhei aquosæ uncias duas vel tres pro re nata.

R. *Asæ fetidæ scrupulos duos,*

Aquæ fontanæ uncias tres cum semisse,

Aquæ cinnamomi spirituosæ unciam dimidiam,

Sacchari albi drachmam unam.

Misce. Dosis uncia una ter die.

The 9th. Her breathing is freer; expectoration easier; pulse moderate; body regular; and she has no return of the colic. She is sometimes very sick with her mixture.

R. *Asæ fetidæ drachmam unam & dimidiam,*

Saponis duri semidrachmam,

Olei anisi quantum satis.

Misce, fiant pilulæ, singulæ granorum quinque.

Capiat æger duas vel tres ter die.

The 15th. The pills agree with her and she continues to recover. The phlegm which she gets up is clearer and thinner, and she looks better in the face. She took a small dose of the tincture of rhubarb yesterday, which answered very well.

The 25th. She has no returns of her asthma nor swelling of her legs, she looks clear and well in her complexion, and can now bear to walk out and use gentle exercise.

Asafetida, when it agrees with the stomach, is sometimes an useful remedy in the Asthma; but if it does not give immediate relief, it is soon apt to become offensive to the patient both from its taste and smell, and likewise to rise up with wind from the stomach, and cause a continual disagreeable taste in the mouth. When it agrees, it is antispasmodic, stimulant, and rather opening.

CASE

C A S E XLI.

The Convulsive Asthma, of seven years standing, relieved by Flowers of Zinc, Musk, and Valerian.

JOSEPH BEAL, aged 16, thin, pale, and narrow in the chest, admitted an out-patient at the York County-Hospital, November 19, 1781, has had an Asthma for seven years, which returns once in two, three, or four weeks, and continues violent for two or three days, and sometimes for six or seven. The fit of the asthma is often preceded by a head-ach. He has a troublesome cough, particularly when the fit is abating, and he then spits up much phlegm of a yellowish color, mixt with a great deal of froth. His cough at present is very violent. He has a pain in his breast under the sternum when the fit is upon him, along with great difficulty of breathing, and constant wheezing. Body regular. Little or no thirst. Pulse small, weak, quick, and irregular. When the fit goes off, his breathing becomes free and natural, and his cough gradually abates. Sometimes his asthmatic fit is the most severe about noon, and rather

rather remits of its violence in the night. During the fit he has no appetite, but takes a little tea or any other light thing in small quantity. His nights are very restless and uneasy. His cough is often the worst in a morning, and continues severe for above an hour. The act of inspiration and expiration is slow, when the asthmatic fit is upon him, but the number of inspirations and expirations in a minute is at that time greater than natural,

Sumat ter die pulverem ex Florum Zinci granis octo & Gummi Arabici granis quinque, — & julepi cardiaci uncias duas.

Capiat pro re nata electarii solutivi drachmam unam.

The 22d. He is not sick with his powder. His breathing is free. He has no pain in his breast, and little or no cough. A small teaspoonful of his electuary at night gives him a stool or two.

Repètantur remedia, sed augeatur dosi Florum Zinci ad grana duodecim.

Sumat alternis noctibus electarii solutivi drachmam unam.

The 26th. He continues better, but is rather sick with his medicine.

December

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December 23d. - He has had a fit of his asthma which lasted near a week, and he is still somewhat stuffed in his breathing. He took his powders in the fit and they agreed with him very well.

The 27th. He has continued the powders regularly, which sometimes make him sick. He had a return of his asthma on the 23d, but it lasted only two days, and was much milder than usual.

January 7th. He has had no return of his asthma.

Continuentur remedia ut antea, sed augeatur dosis Florum Zinci ad grana quindecim.

The 22d. He has had a fit of his Asthma which continued for three days, and his cough was very severe. He was then made an in-patient on the 31st, and had no return of his disorder till the 18th of February. Afterwards he had another fit of his Asthma, in which he breathed with great difficulty; coughed at times considerably; wheezed much; spit up a thick frothy phlegm; had no appetite, and but very little sleep; and his pulse was quick, weak, small, and irregular. He was sick with his powder

powder this morning, and vomited a considerable quantity of phlegm which relieved him. The paroxysm as usual was preceded by head-ach.

February 2d. His fit began to abate the day after I saw him, but it is not entirely gone yet. He still spits up much phlegm. He says this fit was shorter than the last. His nights are greatly disturbed in the fit, but he sleeps a little. Appetite somewhat better; body regular.

March 24th. During the whole of this time, which is above seven weeks, he continued free from his asthma, had a good appetite, and began to look fuller and better in the face. His powders in general agreed well with him, tho' now and then they made him sick, for which reason the dose of the flowers of Zinc was reduced to twelve grains. To-day he is stuffed in his breast, and has a tickling cough.

Fiat venesectio ad uncias octo.

Cras mane capiat, ex proprio vehiculo, tartari solubilis drachmas decem.

Continuentur remedia antea præscripta.

The 25th. His blood is sily. He had five stools with the soluble tartar. He had a fit yesterday,

yesterday, but it has almost left him, and he expectorates freely a white frothy phlegm with his cough. — On the 22d of April he had a slight return of stuffing in his breast attended with an irregular pulse, which was a prelude to a fit on the 25th *, that continued only for a short time and was still milder than usual.

On the 5th of May, his breathing being easy and his cough moderate, I omitted the Flowers of Zinc, and ordered him the following bolus.

*Sumat bis die bolum ex moschi puri granis decem
& conservæ rosarum drachma una.*

*Omittatur pulvis ex Floribus Zinci, sed repetatur
ut antea julepum cardiacum & electarium solutivum.*

The 9th. He was sometimes sick with his bolus, and vomited once with it. His breathing continues free and his cough better.

The 23d. He has vomited the bolus several times. His breathing still continues free, but his cough is rather worse.

Capiat, ex quovis vehiculo, pulveris radice valerianæ sylvestris drachmam unam ter die.

Omittatur bolus, sed repetantur alia remedia.

3 D

June

* Applicetur emplastrum vesicatorium parti dolenti.

June 10th. He had a slight return of his Asthma on the 6th, but his breathing is now free and natural, and he has no complaint except some remains of his cough, which is however attended with an easy expectoration. He was then dismissed much relieved, and returned home into the country with full directions concerning regimen. In six months after he, along with his father, called upon me at York, and told me that he had continued free from his complaint ever since he left the Hospital. His brother afterwards brought me a letter in which is the following passage.

Hackness, June 18, 1783.

— “Pray give my humble respects to
“ Dr Withers, unto whom I owe so many obli-
“ gations, and let him know that I have had
“ some little return of my disorder, but nothing
“ of any consequence as I had before I came
“ to him. But I could wish that I had but the
“ opportunity, I would come to York and show
“ myself to him, as it would only be my duty
“ to do, as I am informed he has asked several
“ times concerning me. I desire therefore that
“ you will let him know as soon as possible.”

PART

PART V.
CASES of ASTHMA,
CURED BY
JAMES'S POWDER
AND THE
PERUVIAN BARK.

CASE XLII.

*The Convulsive Asthma, complicated with a Fever,
Catarrh, and Rheumatism, cured by James's
Powder, Tinctura Thebaica, &c.*

MR. —, aged 24, February 17, 1780,
of a weak constitution, has labored
under his present complaint for a month past;
the symptoms of which are feverishness, head-
ach, thirst, loss of appetite, cough, pain in

his breast, straitness about the pit of his stomach and difficulty of breathing. The difficulty of breathing is not constant, but sometimes increases suddenly to a violent degree, and continues in that state for several hours, then leaves him again, and his respiration becomes free and natural. His pulse is quick and low; body bound; he expectorates but little; and has severe rheumatic pains in his shoulders, elbows, &c. Let him live chiefly on a milk and vegetable diet.

R. Olei olivarum optimi drachmas sex,

Aquæ fontanæ mollis uncias tres,

Aquæ cinnamomi spirituosæ unciam dimidiam,

Syrupi balsamici drachmas tres,

Spiritus cornu cervi optimi guttas triginta.

Misce secundum artem. Sumat æger unciam unam
quinta quaque hora.

Capiat omni nocte hora somni haustum anodynum
ex Tincturæ Thebaicæ guttis viginti, & Pulveris
Jacobi granis septem.

The 19th. The physic operated well. His cough and difficulty of breathing are easier, but his rheumatic pains are still severe. He is not sick with his draught at bed-time, and his feverishness is much abated.

The

The 23d. He continues much better in his asthmatical complaints, but his rheumatic pains are still troublesome.

*Repetantur remedia; & cras mane sumantur hau-
stus sene purgantis unctæ quatuor.*

The 27th. He has had no return of his Asthma; and is less severely afflicted with his rheumatic pains. His appetite is improved, body regular.

March 3d. After this time he had no more returns of his asthma, but his rheumatism continued for some weeks longer, affecting several different joints and muscular parts, and once it fixed severely on his eyes, occasioning a violent inflammation; but by a continuance of the remedies above-mentioned, along with leeches, laxatives, blisters, fomentations, &c. the rheumatic pains were removed; and by the bark, country air, and cold bathing, his constitution was afterwards strengthened, and the cure completed.

This patient was afflicted with a catarrh, asthma, and rheumatism, accompanied with several feverish symptoms. His constitution
was

was weak and relaxed, and yet he was troubled with inflammatory diseases — a case which frequently occurs in practice. With a complication of maladies like this, Dr. James's Powder and the Tinctura Thebaica occurred to me as proper remedies, and the event proved their utility. The fever, catarrh, and asthma were soon cured; but we found more difficulty in removing the rheumatic pains. These, however, were at length overcome by a continuance of the same remedies.

It is difficult to account for the various attacks made by the rheumatism in this case; for it appeared even in the inflammation of his eyes. But though we cannot fully explain the fact, yet it is certain that no disorder of the human body shews itself in a greater variety of parts than the rheumatism; for there is scarce any part, whether internal or external, on which it has not been observed to fix.

This state of body, in which the rheumatism moves from place to place, is generally attributed at its first rise to an inflammatory state of the vessels or (in other words) to an increased tone of the arterial system; and perhaps there is no more probable solution of the difficulty.

Some

Some add a scorbutic humour in the blood; but this, comparatively speaking, is only evident in few cases, and totally absent in many; whereas an inflammatory state of the arterial system is always present. Atony or want of tone in the vessels of the diseased parts is frequently observed afterwards to prolong the complaint, when, by the cool regimen, proper remedies, and the duration of the disease, the inflammatory state is removed. Hence we have the atonic rheumatism as well as the atonic gout, in which the vessels of the parts affected are weaker and more relaxed than natural, and, in consequence of a languid circulation of the blood, the parts themselves feel cold to the touch*. Bleeding in the case of Mr. — could not, on account of his bodily weakness, be advised, but gentle laxatives, a saline oily emulsion, and proper regulations of diet were useful.

* Cullen's Public Lectures on the Practice of Physic.

CASE

CASE XLIII.

The Convulsive Asthma, along with a Fever and general œdematous Swellings, cured by James's Powder, Tinctura Thebaica, &c.

MRS. —, aged 28, November 12, 1784, complained some time ago of a violent pain in her head, with pain and tension of her belly, and swelling of her legs. After the removal of those symptoms, she had a weight and swelling at the pit of her stomach, shortness of breath, head-ach, feverishness, bad nights, universal œdematous swellings, and a quick weak pulse; and on the 24th, she was suddenly seized with a violent wheezing and difficulty of respiration, attended with fever, cough, scanty expectoration, head-ach, thirst, painful inspiration, &c. These symptoms had continued near three days before I saw her. She had had no return of the menses for six months past. Yesterday she lost eight ounces of blood from the arm.

Capiat misturæ spermatis ceti unciam unam & dimidiam ter die; etiamque haustum anodynum ex tincturæ thebaicæ guttis viginti, & Pulveris Jacobi granis septem, omni nocte hora somni.

The

The 23d. She breathes much better. Her draughts have agreed well with her. She has perspired freely, her feverishness is diminished, and her skin feels soft and moist. She has easy nights, her pains are abated, body regular.

On the third of December, five grains of James's Powder in a bolus were ordered to be taken in a morning, and the other remedies continued as before.—Her menses soon after returned; and by means of the bark, country air, and gentle exercise, she recovered her strength, and was freed from her pains, cedematous swellings, cough, and difficulty of breathing.

C A S E XLIV.

The Convulsive Asthma, along with a Catarrh, cured by James's Powder, &c.

MRS. —, aged 31, December 28, 1783, has a severe cough, hoarseness, and stuffing in her breast, of five weeks standing, attended with sudden attacks of difficult breathing, which continue for several hours at a time, till she is quite spent, and almost at the point of fainting. She has been bled with-

out relief. Her face is pale, and swelled in a morning after her asthmatic fit. She can scarce bear to lie down in bed; and her nights are greatly disturbed; her appetite is but indifferent; pulse small; body regular; and she has little or no expectoration. — For those complaints she had a vomit and spermaceti-mixture; but as the symptoms were found to continue, she took on the second of January a bolus twice a day, in which there were seven grains of James's Powder.

January 5th. She was sick with her bolus and sometimes vomited. Her difficulty of breathing is easier, but her cough is still severe. She had her menses last week.

Repetatur mistura spermatis ceti; & continuetur bolus, sed constant singulæ doses ex Pulveris Jacobi granis quinque.

Sumat cras mane haustus senæ purgantis uncias tres.

The 19th. She has no cough, her breathing is natural, countenance clearer, appetite improved.

CASE

C A S E XLV.

The Convulsive Asthma, complicated with an Abscess in the Lungs and a Spitting of Blood, along with a Symptomatic Fever, cured by James's Powder, &c.

JOHAN MILLS, a bricklayer, aged 54, admitted an out-patient at the York County Hospital, April 4, 1785, got a hurt some time ago on his left side, after which he had a very bad cough, a violent pain in his breast, and a large and sudden discharge from his lungs of blood and purulent matter; which symptoms still continue, along with feverishness and constant foreness inwardly. His cough at present is very troublesome in the night, and his breathing suddenly short and laborious, particularly about five or six o'clock in an evening, at which time too the pain and uneasiness in his breast is the worst.

Before his late accident, which was followed by the discharge of blood and purulent matter, his breathing was constantly so difficult that, when walking, he was often obliged to stop for breath, and felt within himself as if he were going to fall down. Since that discharge he can

walk a little better, but all exercise is still performed with the greatest difficulty. His body is regular; face pale and fallow; voice weak; pulse quick, small, and feeble. He has a severe pain in his left side about the hypochondriac region, which is increased by stooping, and by lying down upon it, on which account he rests chiefly on his back or right side. The pain of his left side is much increased when he coughs, so that he is obliged to support the part with his hand.—Let him live principally on a milk and vegetable diet, and in mild clear weather go out a little into the open air.

Sumatur mistura ad astmaticos uncia una & dimidia ter die; & applicetur emplastrum vesicatorium lateri dolenti.

The 7th. His expectoration is still in large quantity, very bloody and purulent, and his breathing at times short and laborious; but it is now rather easier than it was, and his cough less violent. His pulse is quick and weak, and he is sometimes feverish. Body regular. The cough still increases the pain and soreness of his breast. His blister answered well.

Repetatur mistura ad astmaticos, & sumatur hora somni haustus ex Pulveris Jacobi granis septem & Tincturae Thebaicae guttis decem.

The

The 11th. He finds himself considerably better. His expectoration contains much less blood since he took James's Powder. His difficulty of breathing, pain, and uneasiness in his breast still comes on the most violently about six o'clock in an evening, after which he can bear to lie down with ease, and rests tolerably well in the night. A milk and vegetable diet and gentle walking exercise agrees well with him. He thinks his evening draught has been of great service. His body is regular. Feverishness abated. The pain of his left side continues, but is easier.

Repetantur remedia, sed augeatur dos Pulveris Jacobi ad grana decem omni nocte.

The 14th. His expectoration is still bloody and foul, but in less quantity, and comes up without much coughing. He can stoop and lie down with greater ease. The difficulty of breathing, pain and anxiety in his breast continue to return about five or six o'clock in an evening. Body regular.

The 18th. His cough is better, but is most troublesome at night; his breathing is free and easy; and he expectorates little or no blood. The quantity of purulent matter which he spits

is

is less, tho' it is still thick and of a dark color. Pulse frequent, but not so weak as it was, and he can now bear to walk half a mile without resting.

The 21st. The matter which he expectorates is still of a dark color, rather bloody and purulent, but in less quantity. He can lie better on his left side, having a little pain only when he first turns upon it. His breathing is free, body regular.

Continuentur medicamenta, sed constant hora somni singulae doses ex Pulveris Jacobi granis quindecim.

The 25th. He is considerably better; looks clearer in the face; walks frequently in the open air; does not follow any business to fatigue himself. He is rather sick with his draught, but never vomits it. His expectoration is less in quantity, less tough, comes up still more easily and without any mixture of blood, and he can lie well on his left side. His pulse is stronger and not more than 90. Appetite good.

The 28th. He continues to recover. His strength is much improved, so that he can now walk two miles without resting himself. His diet consists chiefly of pudding, milk, a little fish, and other light things.

May

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May 9th. He walked too much seven days ago, which has rather increased his cough, spitting, and pain of his left side.

Mittatur sanguis ad uncias octo.

Repetantur medicamenta; & capiantur cras mane rhei pulverati grana viginti et quinque.

The 16th. He finds himself almost well and able to return to his business; his voice is clear and natural; he spits no blood, but coughs up a little white transparent phlegm, such as he is generally accustomed to do when in health. At this time I cautioned him to lift no heavy weights; to make no long days work; to guard against sudden heats and colds; and still to be cautious in his diet, avoiding full meals, strong liquors, and stimulating food.

The 30th. He is free from complaint. Let him be dismissed.

This was a very dangerous and alarming illness, and, along with his pale fallow countenance, weak quick pulse, and hectic fever, seemed to threaten a speedy and fatal termination. Before he got the hurt upon his side, the obstruction in his lungs and difficulty of breathing

breathing were the most violent, along with a total inability to use exercise. After his accident, the discharge of blood and purulent matter (which he called corruption) came on suddenly, and was attended with some relief of the complaint in his breast; but still the symptoms in a less degree continued, there being severe pains, sudden and violent spasmodic affections of the lungs, and a large discharge of blood and purulent matter.

The Asthma, in this case, is rather to be considered as a symptomatic than a primary affection. The stroke which he got upon his breast did not occasion his disease, but only hastened the rupture of an abscess in his lungs, and the consequent discharge of blood and purulent matter. When I saw him, there was no mark of any external violence to be found where the hurt was received.

With regard to the treatment, he was too weak to bear bleeding; and emetics would have been dangerous. The remedies and regimen ordered were so effectual, even beyond my expectation, that I had scarce any occasion to have recourse to other means. James's Powder in this case acted chiefly as a powerful anti-spasmodic

spasmodic, took off the fever, and promoted perspiration by causing a determination of blood to the surface of the body. The tinctura thebaica assisted its salutary action by diminishing irritation, quieting the cough, allaying pain, and abating the spasmodic affection of the air-vessels. These effects were successfully obtained without any heating stimulating remedies, which would have been very dangerous in the case before us.

In consequence of a fresh cold got on the 2d of May, I ordered him (as soon as I knew of it) to be immediately bled, for he had then recovered his strength, and was able to bear that evacuation. A gentle laxative was also prescribed with the same intention. In all cases of fresh pulmonic inflammation, we regularly observe that the greatest success is found to follow a cautious, but vigorous method of cure at its first rise; for after it has got strong hold of the constitution, the treatment is much weaker, and consequently less effectual. *

* Vide Page 314, Case XXIX.

C A S E XLVI.

The Convulsive Asthma, complicated with a Fever, Spitting of Blood, and Ulceration of the Lungs, cured by James's Powder and Tinctura Thebaica.

CHARLES DUNCOMBE, aged 36, admitted at the York County-Hospital, September 22, 1785, has a very bad cough, with a purulent bloody expectoration and great difficulty of breathing, particularly on motion. His difficulty of breathing comes on suddenly at five or six o'clock in a morning, and continues for an hour or longer. His body is regular, pulse low and quick, and he is thin and pale in the face. The greatest sense of oppression and uneasiness arising from his complaint seems, according to his own account, to lie chiefly at the pit of his stomach. The week before last, he discharged from his lungs at different times above forty ounces of blood, but that discharge is now much abated. His appetite is bad, legs ake, nights very indifferent, expectoration yellow and in large quantity. He has often a severe pain under the breast-bone, which is increased by his cough. Last April he got a strain with piling deal boards, which
first

first brought on his complaint, and he has never been free from it since, but he has been much worse for these last five weeks.

Sumatur misturæ ad asthmaticos sequiuncia ter die—Et haustus anodynus ex Pulveris Jacobi granis novem Et tincturæ thebaicæ guttis viginti omni nocte hora somni.

The 26th. He finds himself much better. He still spits a considerable quantity of thick yellow matter, but with little or no mixture of blood. His cough and difficulty of breathing are much diminished; appetite improved; nights tolerably easy; body regular.

The 29th. He finds himself very much recovered. The matter which he expectorates is still thick, yellow, and opaque, but not near so much in quantity as before. His breathing is easy and natural, and he is free from the pain of his breast. His fits of difficult breathing, which came on in a morning, are now entirely removed; body regular; appetite good; pulse low, but soft and natural; and he rests well at nights.

October 3d. He is free from complaint. Let him be dismissed.

CASE XLVII.

The Convulsive Asthma, complicated with an Intermittent Fever, followed by purple spots on the skin, and bleedings from the nose and gums, cured by the Peruvian Bark and Flowers of Zinc.

ISABEL TAYLOR, aged 35, admitted a patient at the York County-Hospital, March 16, 1780, of a middle size and spare habit, has had an Asthma nine weeks, which used to attack her every night about twelve o'clock, and continue without any mitigation of its symptoms till she rose in the morning. Her difficulty of breathing during the fit was so violent, that she was forced to sit up in bed, not being able to bear a recumbent posture. Her pulse was small, but rather hard, and her expectoration difficult.—For those complaints she attended some days at my Dispensary, and, at different times, was ordered to keep her body regular with a mixture of soluble tartar—to lose eight ounces of blood—to take an emetic, the Zinc pills*, and an anodyne draught at bed-time with twenty drops of tinctura thebaica.

From

* Vide p. 249.

From those remedies she found great relief, so that her Asthma now does not come on till two o'clock in the morning, and lasts only about an hour or two, but with this material difference, that it is attended with a regular attack of the ague, which begins with coldness and trembling, followed by a hot and sweating fit. This complicated malady of the asthma and quotidian intermitting fever has come on every night for five nights past, which has greatly weakened and harrassed her constitution, and made her appear thin and emaciated, with pale lips and a pale fallow complexion. Her body is not bound, skin dry, expectoration difficult, appetite bad. She had her menses about a fortnight ago, which are regular as to time, but generally in small quantity. Her pulse is still rather hard, but small and quick. She is subject at times to a pain in her breasts, which shoots from one side to the other. She thinks her disorder arose at first from cold in consequence of having her feet wet, to which she is not accustomed.

R. *Corticis Peruviani Pulveris unciam unam,*

Syrupi sacchari quantum satis.

Misce, fiat electarium, omne inter paroxysmos, partitis vicibus, sumendum.

Capiat julepi cardiaci unciam j. in languoribus.

The

The 20th. She continues to look very ill and yellow in the face. She has only had one attack of her ague since the 16th instant, with which her asthma came on as usual during the cold fit. She has taken an ounce of the Bark every twenty-four hours, and it has agreed well with her stomach. Since her asthma and intermitting fever were stopped, she coughs considerably, and is sick in a morning, but gets up little or no phlegm. She has had, for three days past, a return of the pain in her breasts, shooting as before from one side to the other. Her body is regular, pulse quick, skin soft, and she has less thirst upon her.

Repetatur julepum cardiacum; & sumatur, alternis diebus, electarium Corticis Peruviani.

The 23d. Her medicines agree well with her, and she finds herself much better. Her breasts feel sore, but the pain in them is greatly abated. Her cough, though at times still troublesome, is attended with a free expectoration. She has had no returns of her asthma and fever, but complains of being costive.

Continuetur ut antea julepum cardiacum, & sumatur, tertio quoque die, electarium Corticis.

Capiat hora somni pilulas Ruffi tres quando alvus obstricta sit,

The

The 27th. She has taken her medicines regularly as ordered, and upon the whole finds herself considerably better. She complains to-day of a pain at her stomach, which is increased by her cough. She has had no return of her fever; but, for these two nights past, has had a slight attack of her asthma at one o'clock in the morning, which lasted about a quarter of an hour, and then terminated with the expectoration of a little phlegm of a bluish cast. Her body is open with the pills, pulse natural, tongue clean, skin cool.

Applicetur emplastrum vesicatorium scrobiculo cordis.

Repetatur ut antea julepum cardiacum, & sumatur electarium Corticis quarto quoque die.

The 30th. Since the application of the blister, the pain is removed from her stomach to her right side just about the short ribs. She has had no return of her fever or asthma, but has been affected with sickness for these two or three last days. Her electuary, however, agrees well with her, and she was never sick with it except after the first dose. She has a tickling troublesome cough, which sometimes excites a pain in her left side.

April

April 3d. She had a return of her fever three days ago, and it lasted twenty-six hours. It came on without any sensible cold fit, but after the hot fit, she sweat considerably, which evacuation (to use her own words) had a disagreeable smoky smell. This fit of the ague was not accompanied with any asthmatical symptoms. Her throat felt sore from a cold, which she had got the day before this last attack of her fever. When the fever abated, she had a copious sediment in her urine, since which her appetite has been improving, her pulse is stronger, and her lips of a better color. The weather is wet and stormy, and her cough is somewhat increased by cold. Her body is kept regular by the occasional use of two or three opening pills.

*Repetatur, ut antea, julepum cardiacum & sumatur electarium Corticis tertio quoque die. **

The 6th. The weather is very cold, and there is snow on the ground. She has had no return of her ague or asthma, but her cough continues. She observes at times a small red eruption dispersed over her body, which itches considerably, but soon disappears again. She has

* As the Ague returned, I was obliged to order the Bark to be again taken every third day, and omitted only two intermediate ones.

has had no menstrual discharge for seven weeks past, tho' she was before regular as to time, but not in sufficient quantity. Her body is open with the pills. She has had some return of pain in her breasts. Her medicines agree well with her.

The 10th. The weather at present is severe and frosty, and she has got a fresh cold, which has increased her cough and expectoration. She has no asthma or intermittent fever. Three pills every other night keep her body open.

Omittatur electarium Corticis.

Sumantur ter die uncia duo decocti mucilaginosi, & continuentur pilulae Rufi duo vel tres alternis noctibus.

Afterwards she had no more returns of the ague, but had now and then a slight fit of the asthma, sometimes every night, and sometimes every second or third night, which was easily removed by having recourse again to the Zinc pills. — On the 27th, when her pulmonary complaints were entirely gone except a little tickling cough, a rash appeared, chiefly on her arms, shoulders, and back, consisting of small red spots, hot and burning, a little raised above the skin, and spread almost universally over her body, which itched considerably, and, after

having continued some hours, disappeared, but soon returned again.—On the first of May, she complained of sickness, head-ach, and bleeding at the nose and gums. The rash above-mentioned continued, but with an evident mixture of purple spots, called by Physicians *petechiæ*. They were small, of a dark livid color, most numerous on her breast, not rising above the skin, nor changing their color on pressure. Pulse natural. Great prostration of strength.—For those symptoms she took a strong decoction of Bark; and her body was kept regular with the pil. Ruffi.

She had formerly lived chiefly on tea, broth, bread with fresh butter, and a little fresh meat at noon, but had eat no salted provisions.—Potatoes and milk disagreed with her, and ale and beer made her feverish.

The rash, bleedings at her nose and gums, and purple petechial spots continued to recur for many weeks, but at last were cured by a steady perseverance in the remedies above mentioned, along with pure air, great cleanliness, gentle exercise, and an antiputrescent diet. Towards the latter end of the complaint, as her stomach could not bear the decoction of
Bark,

Bark, I ordered in the place of it Huxham's tincture. All this time she had no return of her ague, and her breathing was perfectly free and natural, but she had several attacks of the rheumatism in her sides, shoulders, legs, thighs, &c. without any swelling or redness of the parts affected.

Isabel Taylor first attended upon me at my Dispensary for some days before she was admitted a patient at the York Hospital. Her asthmatic fits then began at twelve o'clock at night, and continued till morning with great violence. As her pulse was not weak, and she had had no aguish symptoms, one bleeding was thought adviseable, and it was of use to her in diminishing the severity of the fits. The flowers of Zinc likewise were very efficacious in obviating the spasms of the lungs.

Afterwards a quotidian intermitting fever supervened on the asthma, which soon altered her complexion, rendering it pale and yellow, and weakened her constitution in a very rapid manner. I then made her an out-patient at the Hospital, where, as she was already well prepared for it, she was immediately ordered to

take an ounce of the Bark in the intervals of the fits, which, as her disorder returned every twenty-four hours*, was as much as her stomach could bear. As the asthmatic fit came on with the intermittent, I was in hopes by this method to cure effectually both disorders at once, and more especially as it is well known, that, if the Asthma recur periodically without a fever, the Bark, when given in sufficient quantity, will sometimes put a stop to it. As the Bark agreed well with her stomach, and had a good effect, I never altered the mode of its exhibition, but (as appears from the prescriptions) omitted it day after day, till it became unnecessary to continue it any longer.

It is a great error for a patient in an ague to omit the Bark too soon, especially if he lives in the same low situation, where the disease was first contracted; for in that case the same cause, marsh effluvia, (which are vapors arising from marshy grounds) continues to act; and if the constitution be not properly supported by diet and tonics, the ague will often return. But if
the

* The Bark is often given in Agues with as good, if not a better effect in the night than in the day, as there are then no meals to interfere with the use of it. The patient should drink some thin diluting liquor after each dose.

the patient have an opportunity of changing the air, and living in a dry elevated part of the country, much less Bark will generally be sufficient; a fact of great consequence to those with whom that remedy, when given in large quantity, is found to disagree.

In the cure of intermittents, it is necessary to caution patients against keeping themselves too close and hot, when the cold fit is going off; for by this means the sweating fit is much diminished, the strength of the constitution preserved, and consequently internal obstructions prevented. Isabel Taylor found that, when she lay cool during the hot fit, she avoided profuse sweats, which otherwise came upon her and weakened her much.

After the intermittent was entirely stop'd, there were still some remains of her Asthma; for the more speedy removal of which I again prescribed the Zinc pills. These produced a slight degree of nausea, tho' given in a dose of a few grains only, and had a very good effect.

Some time after, a violent rash came out, consisting of small red pimples, dispersed in different places over her body, followed by a great number of purple spots, which were evidently
petechial,

petechial, attended with bleedings at the nose and gums,—certain symptoms of a dissolution of the blood. The first eruption was critical and salutary, and followed by an alleviation of other complaints; but the latter was symptomatic of the putrid tendency of the fluids. As there was little or no fever along with the petechial spots, and as all her other complaints were nearly removed, I was less alarmed at this new disease. Fevers of different sorts, and intermittents among the rest, are often observed to injure the texture of the blood in this way*, tho' sometimes indeed petechial spots, as I have seen in several instances, will appear without any evident fever having preceded†. I had an example of this a few months ago in a young Lady about eleven years of age, in whom there were hundreds of purple spots, which all came out nearly in one night. Her nose too at times bled profusely. Mrs. ———, in the neighbourhood of York, had likewise a great number of petechiæ of a very obstinate nature, when she was pregnant of her last child, along with a most severe pain in

* Vide Pringle's Observations, page 287.—Monro on the Diseases of Military Hospitals, p. 1.—Cleghorn on the Diseases of Minorca, p. 147.

† Vide Duncan's Cases and Observations, p. 90.

in one side of her upper jaw *. She had too a very dangerous discharge of blood from her nose; and at another time a great quantity of the lochia after delivery. Those hemorrhages and petechial spots arose from a dissolved state of her blood.

For this complaint of Isabel Taylor, I prescribed a strong decoction of Bark, and recommended chiefly a vegetable diet †, along with the moderate use of cordial antiputrescent liquors. She could not take the Bark again in substance, otherwise I should have prescribed the powder in preference to the decoction. The decoction being at last too strong for her, I was obliged to have recourse to the tincture, which was given till the cure was compleated. She found great benefit in this disease from being much in the open air. Many of the poorer sort of people injure their health very materially

* This pain returned every four or five minutes both day and night without intermission, although every tooth in the diseased part had been drawn before I saw her.

† As her stomach was very weak and she was accustomed to have a little fresh meat at noon, and as it was evident the dissolved state of her blood did not arise from her diet, but from the fever and diminished tone of her fibres, I was not strict in forbidding it, nor perhaps could she have followed my advice if I had.

rially by living in a close confined atmosphere. They err even in this respect much more than they are obliged to from necessity; for they absurdly think it dangerous to have a door or window open during any illness; and thus to shun a less evil, they fall into a greater, and in no complaints more certainly, than in those in which the blood is in a dissolved and putrid state.

It is worth observing that on the 18th of May she was feverish, and had a lax upon her, after which there was a fresh appearance of purple spots, so great was the effect even of that short return of fever. It was near two months from first to last, before those purple spots were entirely removed; for as some died away, others appeared. The young Lady above mentioned of eleven years of age was cured in less than a week. I have seen several cases in which they have continued three or four weeks. In Mrs. —'s case the petechiæ have continued to come and go for years, altho' she has lived in the country, and used the most antiputrescent diet, along with cool fresh air, regular exercise on horseback, the Bark in substance, elixir of vitriol, and many other powerful antiscorbutic remedies.

The

The sweat mentioned in the case of Isabel Taylor, which followed the intermittent fever on the first of April, had a very particular disagreeable smell, which probably arose from the impure state of her blood. This symptom is worthy of attention, with a view to discover how far it may occur in similar cases of putrescency. It preceded the appearance of the purple spots about a month.

The different types too, which the Asthma assumed after the intermittent fever was stopt, afford matter of curious observation; for sometimes it came on every night, sometimes every other night, and sometimes it missed two whole nights before it returned, and thus was, at different periods, a quotidian, a tertian, and a quartan. Her complaint was said at first to have arisen from cold, in consequence of having her feet wet, which is a common exciting cause both of asthmas and intermittents, and especially in such as have weak and delicate constitutions, who should always be very attentive to keep their feet dry.

C A S E XLVHI.

The Convulsive Asthma, complicated with a Spitting of Blood, and a Quotidian Intermittent Fever of three months standing, cured by the Peruvian Bark.

THOMAS SMITH, aged 34, admitted at the York County Hospital, May 11, 1780, is troubled with a violent cough, stuffing in his breast and difficulty of breathing, which last symptom comes on suddenly, and is at times very severe. His cough is attended with an expectoration of phlegm, mixed with blood. This complaint in his lungs is complicated with a quotidian ague of three months standing, but which is not quite regular as to the time of its attack. His pulse is weak—his countenance pale, yellow and depressed—and his legs and feet much swelled, particularly in an evening. He is a sailor, and has been formerly addicted to the free use of strong liquors. After taking a dose of rhubarb to open his body, he began with the following remedy.

*R. Corticis Peruviani Pulveris drachmas decem,
 Syrupi pectoralis quantum satis.
 Fiat electarium omni die inter paroxismos sumendum.*

The

OBSERVATIONS. 427

The 15th. He has had no return of his
ague; his difficulty of breathing is somewhat
easier; his cough less violent; and his spit-
ting of blood diminished.

*Repetatur ut antea Electarium Corticis, alternis
diebus sumendum.*

The 18th. He has had no return of his
ague, and all his asthmatical symptoms con-
tinue easier, except his cough, which is still
violent. His body is regular, and his legs are
less swelled in an evening.

The 22d. His cough continues severe, and
his pulse is low. He has had no return of his
ague; spits no blood; appetite better; strength
improved.

Repetatur electarium tertio quoque die.

The 25th and 30th. He continues to recover.
His cough is better, and the swelling of his
legs much abated.

June 5th. He has had no return of his ague,
but the swelling of his legs is not yet entirely
gone.

Repetatur electarium quarto quoque die.

*Sumat ter die misturæ diureticiæ uncias duas.**

3 H 2

The

* Since the discovery and publication of the use of Tobacco
in dropical cases, by my worthy and learned friend Dr. Fowler,
of Stafford, I have given an infusion of that remedy as a dia-
retic, in such cases as this, with great success.

The 16th. He has no complaint, looks fatter and clearer in the face, his legs do not swell, and his cough has entirely left him. He was then dismissed cured, being advised to continue his electuary a little longer by way of preventing a relapse.

The disease of Thomas Smith is one which affords a striking example of the good effects of the Peruvian Bark, given in large quantity, in a very critical and dangerous case; but there was no other chance for the safety and recovery of the patient. Had the disorder been properly treated in its early stage, the cure in all human probability would have been easy and certain. But when I saw him, he had a very bad catarrh and spitting of blood, along with evident symptoms of a convulsive affection of the lungs, which was particularly troublesome during the cold stage of the fever. His intermittent attacked him every day, and was of three months standing, which had greatly reduced his constitution, rendered his countenance pale and yellow, and brought on dropfical swellings of his legs and feet.

In

In this dangerous and melancholy state, as there was no time to be lost, the Peruvian Bark was given in substance and in large quantity during the intervals of the disease; for if the intermittent had not been cured, inevitable death must in a short time have been the consequence. It was impossible, when I first saw him, to relieve the complaint at his breast, unless I could put a stop to the fever; and no remedy appeared to me so likely to perform a cure in this case as the Peruvian Bark, which therefore was ordered in large doses, frequently repeated, notwithstanding the catarrh, the spitting of blood, difficulty of breathing, and other asthmatical symptoms. Had the Bark been given in small doses, or in decoction or infusion, it might have done the patient harm, without the most distant probability of curing the intermitting fever. He had ten drams of the powder of Bark made into an electuary, and he was ordered to take two or three teaspoonfuls to a dose, and repeat it as often as his stomach could bear it, till the whole was consumed in the interval of the disease. The manner of continuing the remedy at first till the ague was stopped, and the gradual method of leaving it off, was similar to that which was adopted in the preceding case. The largest and most frequent

quent doses of the Bark in both instances were advised to be taken as near as possible to the return of the fever. Through the whole of the cure the patient was directed to be well supported with proper nourishment. By this treatment, his ague was stopped in two or three days, and a relapse likewise prevented. The Bark at the same time proved an excellent antispasmodic, relieved the convulsive affection of the air-vessels of the lungs, and gave tone and vigor to the whole constitution. The cough, and swelling of his legs, were the last symptoms which left him. He was then dismissed, and had along with him four pots of his Bark-electuary, which he was ordered to take at proper intervals. On this occasion it will only be doing justice to our Hospital to add, that the Bark (as well as every other remedy) is always the best that can be procured, and that those Gentlemen, who provide us with it, never disappoint us in its genuine goodness. We have had a great many intermittents at the Hospital of late years, and the best Bark, whether of the common or red sort, seldom or never fails to remove them, unless there is some incurable chronic disease, as a dropsey or consumption, complicated with them. Without medical aid, this patient, provided his constitution

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tion could have supported his complaints a while longer, would most probably have fallen into an incurable consumption; for his cough and difficulty of breathing were very violent, and the phlegm which he got up was mixed with blood, if not with purulent matter. I have often observed agues to be accompanied with very bad coughs and consumptive symptoms, which, although not at first brought on, were certainly increased greatly by the patient's being kept very close and warm, and his whole frame weakened and relaxed by profuse sweats after the cold fit of the ague.

C A S E XLIX.

The Convulsive Asthma, complicated with a Tertian Ague, and followed by the Influenza, cured by the Peruvian Bark.

WILLIAM PRESTON, aged 16, admitted at the York County Hospital, May 23, 1782, has had a tertian ague for a fortnight past, which came on after bathing in cold water, when he was previously heated with exercise. He has likewise a violent difficulty of breathing, which attacks him suddenly,

denly, and produces a sensation of great pressure over his breast, as if (to use his own expression) he had a tun weight upon him, so that he can then scarce breathe. Along with these complaints he has a severe cough, by means of which he gets up a considerable quantity of phlegm, tinged with blood. He is of a thin spare habit, his face pale and of a leaden color, pulse weak, appetite impaired, body bound.

His ague generally comes on at eleven o'clock at night. His oppression at his breast and difficulty of breathing, attended sometimes with sickness and vomiting, is the worst in the hot fit, after which he sweats profusely. He is very heavy and lethargic in the cold fit, having his eye-lids mostly closed. He was desired to keep himself cool during the hot stage of the fever, and to be extremely cautious to avoid profuse sweats.—For the abovementioned complaints he took an ounce of bitter purging salts, a pectoral decoction, and the following draught every night at bed-time.

R. *Fulepi cardiaci unciam unam & dimidiam,*
Tinctura Thebaica guttas viginti,
Tartari Emetici semi-granum.

June

June 6th. His ague continues to return every other day. He had it to-day at seven o'clock in the evening, and his oppression at his breast and difficulty of breathing were very violent, accompanied with sickness and vomiting, but did not last quite so long as usual. His cough is rather better, spitting somewhat abated, body regular, and he does not sweat much after the hot fit.

Sumat, in julepo menthae, pulveris Corticis Peruviani drachmam unam tertia quaque hora.

The 10th. His powders have agreed very well with him, except the first dose, which he vomited. He has had no return of his ague since the 6th instant, nor of the oppression at his breast. His appetite is good, body regular. He was seized the other day with the Influenza along with all his family. His cough is increased by it, but he spits freely.

The 24th. He continued the Bark till the 15th, gradually diminishing the quantity, and then took an ounce and a half of the spermaceti-mixture three or four times a day. He has at present no ague, cough, or difficulty of breathing, and his lethargic symptoms have entirely left him.—Let him be dismissed.

We must take notice here of the mode in which the Asthma came on, giving a sensation of great pressure on his breast, as if a heavy weight were laid upon him. This is no uncommon symptom in Asthmas, and, when violent and continuing for some hours, is not without danger, especially in old, weak, low-spirited patients, or in such as have lived fast, and are gross and plethoric, having their vessels overloaded with blood.

Another thing to be remarked is, that this man had the Influenza, which, in the city and neighbourhood of York in the summer of 1782, was epidemic in the highest degree possible. It spread by a very active contagion; and generally, tho' not always, ran thro' whole families. The season and particular state of the air, no doubt, favored its progress, which was uncommonly rapid. It came on like a catarrh, and was attended in its course with nearly the same symptoms. A very frequent exciting cause was the imprudent application of cold, which often happens in hot weather, when people grow careless of themselves. The method of cure differed little

little or nothing at this place from that of a common catarrh. As I had seldom fewer at a time than thirty or forty patients in the influenza, I had frequent opportunities of observing the effects of the medicines employed. In the case of William Preston there was no symptom of any consequence, except a cough, and that was attended with no pain, and scarce any fever. For this reason I did not omit the Bark, which he was then taking, and which seemed to answer so well, and more particularly as that medicine was useful in some cases of the influenza, when the constitution was relaxed and there were no inflammatory symptoms. In these last, blood-letting and other considerable evacuations were hurtful. Gentle anodynes at bed-time to quiet the irritation which excited the cough, were sometimes employed with advantage. *

* Vide page 159, where the treatment of the Influenza is further considered.

CASE L.

The Convulsive Asthma, complicated with a slow fever of an intermitting kind of twelve weeks standing, cured by the Bark.

MR. —, aged 60, November 20, 1785, has had a slow fever hanging upon him for ten weeks past, which is of the intermitting kind, and returns every day, but not at any stated period. His pulse is quick and weak, and his legs swell much in an evening. He has likewise a violent difficulty of breathing which comes on suddenly along with his ague, and is the most severe just after the cold fit. It is followed by a bad cough and an expectoration of phlegm.

His breathing is generally short, particularly on motion, but it is very laborious when the asthmatic fit is upon him. He has great thirst during the time of the fever, and complains of a pain in his breast. Sometimes his difficulty of breathing is very severe, when he has little or no cough. His abdomen is swelled, feels harder than natural, and is painful on pressure. Appetite bad. Costiveness.—For those symptoms

toms he took, at first an emetic, a gentle dose of rhubarb and magnesia, and a pectoral decoction with the volatile alkali.

On the 5th of December, as his pulse grew weaker and quicker, and his ague, though not regular, continued obstinately to return once in twenty-four hours, attended with a violent difficulty of breathing, I ordered him in the intervals of the fits a bolus, consisting of a dram of the Bark, to be taken every third hour, and washed down with a cordial draught.

By this treatment his ague was stopped in three days, and by continuing a dram of the Bark four times in twenty-four hours, he had afterwards no return of it; and his difficulty of breathing, cough and spitting, swelling and hardness of the abdomen, flying pains, &c. were entirely removed. He left off the Bark about the middle of January. During the time of his taking it, he had two or three doses of gentle physic, which gave him a few loose stools, and relieved the pain, tension, and swelling of his belly.

It appears from this, as well as the three preceding cases, that the Asthma, when complicated

plicated with a fit of the ague, constitutes a very formidable disease. During the cold and hot fits of an intermittent, the breathing is always short, but this is trifling in comparison of the other. In one case, the breathing, tho' short, is tolerably free, but in the other it is laborious. As the hot fit abates, a moderate sweat breaks out, the spasmodic affection of the lungs diminishes, expectoration becomes easier, the breathing natural, and the urine deposits a lateritious sediment. The quantity of phlegm which in general is spit up in this disorder, will by no means account for the violent difficulty of breathing which occurs, nor for the sudden manner in which it goes off. During the fit of an ague, spasms in different parts of the body are very apt to take place. Spasmodic constrictions of the skin always occur in the cold and hot fits. I have seen regular fits of the colic begin and end with those of an intermittent, which were all cured by the Bark. Even general convulsions have made their attack *. The nervous system seems at that time to be very subject to spasmodic affections. Hence it is not surprizing that the lungs, especially when previously diseased, should be affected in a similar manner.

The

* Vide Boerhaave's Aphorisms and Van Sweiten's Commentaries.

The case of Mr. — had all the characteristic marks of the convulsive Asthma. His difficulty of breathing came on by fits, which returned at certain intervals, and, from their violence and the shortness of their duration, could possibly be attributed to no other cause but spasm. I mention these facts here more particularly, because this is a disease which is apt to be overlooked, unless the practitioner is very pointed in his inquiries concerning the mode of its attack and of its termination. Every one must observe that the lungs are much affected, but the nature of the affection is not always so clearly understood. I have had many cases of this kind under my care, and have always found the Bark very successful. The vulgar notion, that the Bark increases all difficulties of breathing by occasioning strictures on the breast, is perfectly groundless; for in these cases it is not only safe, but is the most effectual means of curing the disease, and of preserving life.

F I N I S.

The case of Mr. ——— had all the characteristic
 marks of the convulsive Asthma. His diffi-
 culty or breathing came on by fits, which re-
 turned at certain intervals, and from their vio-
 lence and the shortness of their duration, could
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 breathing by occasioning frictions on the
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 cases it is not only safe, but is the most ef-
 fectual means of curing the disease, and of
 preserving life.



A N

ALPHABETICAL INDEX

Of the Prescriptions used in the preceding Treatise, as well those which are extemporary, as those of the York County-Hospital.

IT was the intention of the Author to have published those prescriptions out of the Dispensatory of the York County-Hospital, which are mentioned in the foregoing cases; but this he now finds would be a needless addition to his work, as there are already published among the cases so many extemporary prescriptions, which either are the same as those of the York County-Hospital, or so very nearly resemble them, that the difference is not worth notice. For the convenience, however, of the Reader, there is subjoined an Alphabetical Index of the prescriptions which are already published in this Treatise, and likewise of those out of the York Hospital Dispensatory, with an occasional explanatory note where necessary, or with a reference to a similar prescription among the cases.

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* The first, which are warmer, were used in cold and weak constitutions, where a stimulus was necessary. In other cases, the latter were preferred, which were of a less stimulating nature.

† R. Decocti mucilaginosi uncias duodecim
Julepi e camphora uncias quatuor

‡ R. Cremoris tartari unciam unam,
Mellis optimi vel Syrupi communis quantum satis.

§ This draught contains twenty drops of Tinctura Thebaica.

** This draught contains fifteen grains of Ipecacuan.

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- R. Salis diureticæ drachmas tres,
- Aquæ fontanæ uncias septem,
- Spiritus vini Gallici unciam unam,
- Syrupi simplicis quantum satis. Misce.

† This mixture is made up in the common way with the infusion of fena, manna, &c. &c.

- † ——— duo,
- septem,
- Tinctura aromaticæ drachmas sex,
- Syrupi sacchari drachmas tres. Misce.



Lately published by the same Author,

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"It is with pleasure we can say, in respect to the execution of the work before us, that it exhibits undoubted proofs of an accurate and extensive acquaintance with the science of medicine, especially in the improved state in which it is now taught in the University of Edinburgh. It may indeed be thought, that it is too exclusively calculated for the meridian of that place, the greatest part of its authorities being derived from thence, and its language speaking the peculiar tenets of the Cullenian School. The Writer has, however, in general, kept sufficiently clear from hypothetical reasoning, and has delivered himself in a style, not only correct but elegant.— His observations are classed under the following heads of inquiry. 1. Of Blood-letting. 2. Of Emetics and Purgatives. 3. Of Sudorifics. 4. Of Blisters. 5. Of Stimulants. 6. Of Sedatives. 7. Of Tonics or Strengtheners. All these afford a variety of remarks, which may prove instructive not only to the tyro, but to those who are far advanced in the study and practice of medicine."

Monthly Review for April, 1777.

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"Though Chronic Weakness is confessedly the origin of a great variety of disorders, it has hitherto never been treated by medical writers with that degree of attention and accuracy which the importance of the subject requires. It is, therefore, to investigate the nature of this indigestion, so prolific of numerous and stubborn complaints, cannot fail of being highly acceptable to those who wish the advancement of
physical

physical knowledge, especially when it is executed by one who has had great experience in the history and cure of the disease. Our Author's observations, relative to the therapeutic management of the disease, though not new, are judicious and well founded; and from the present, as well as a former specimen of his medical discernment, we entertain no doubt, that what he proposes to write hereafter on other chronic complaints, to which this treatise is a prelude, will afford equal satisfaction, if not additional information to the faculty."

Critical Review for July, 1777.

"Sensible and judicious remarks on the proximate causes, symptoms, and method of cure, of a general debility of the nervous system, written, as it seems, by way of introduction to future tracts on particular chronic complaints."

London Review for October, 1777.

E R R A T A.

P. 46, l. 4 of the note, for *town*, read *Nork*.

P. 145, l. 21, for *duis*, r. *duabus*.

P. 173, l. 1, for *tres*, r. *tria*.

P. 259, l. 16, for 1781, r. 1782.

